STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 155364

TO: Shaojia A Jiang **Location: REM 4B09 / 4B18** **Art Unit: 1617** **June 3, 2005** **Case Serial Number: 10/612163**	**From: P. Sheppard** **Location: Remsen Building** **Phone: (571) 272-2529** **sheppard@uspto.gov**

Search Notes

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FILE COVERS 1907 - 3 Jun 2005  VOL 142 ISS 24
FILE LAST UPDATED: 2 Jun 2005  (20050602/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

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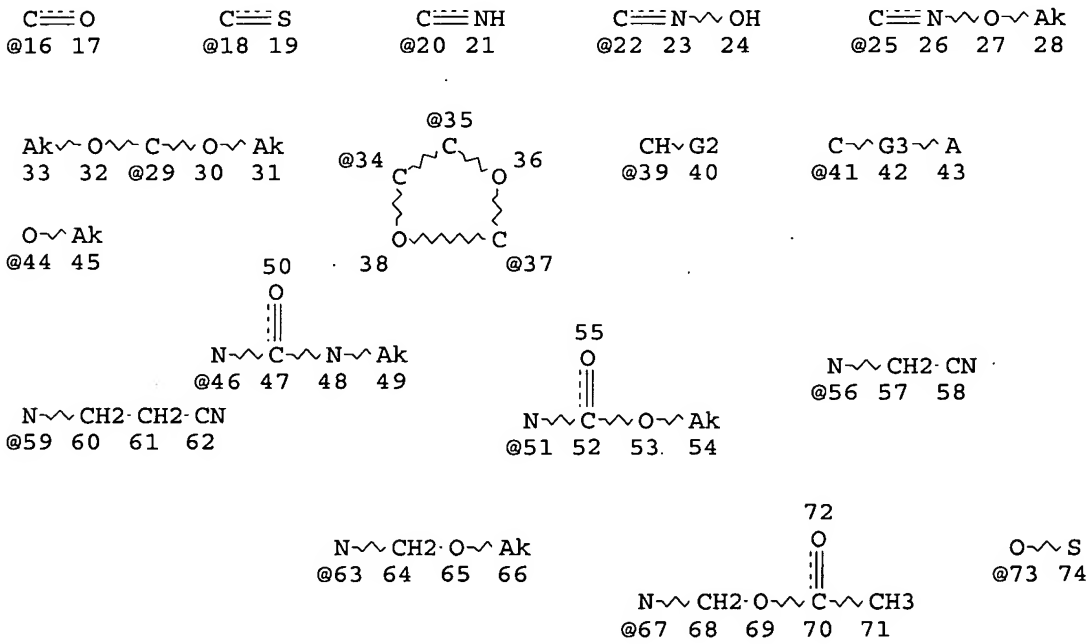

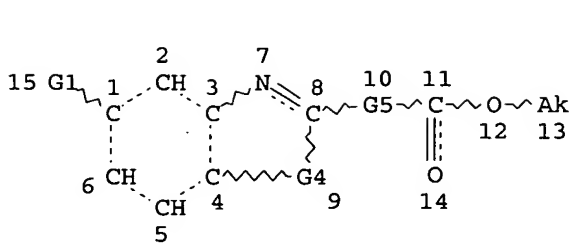

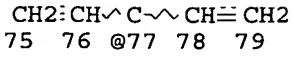

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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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STEREO ATTRIBUTES: NONE
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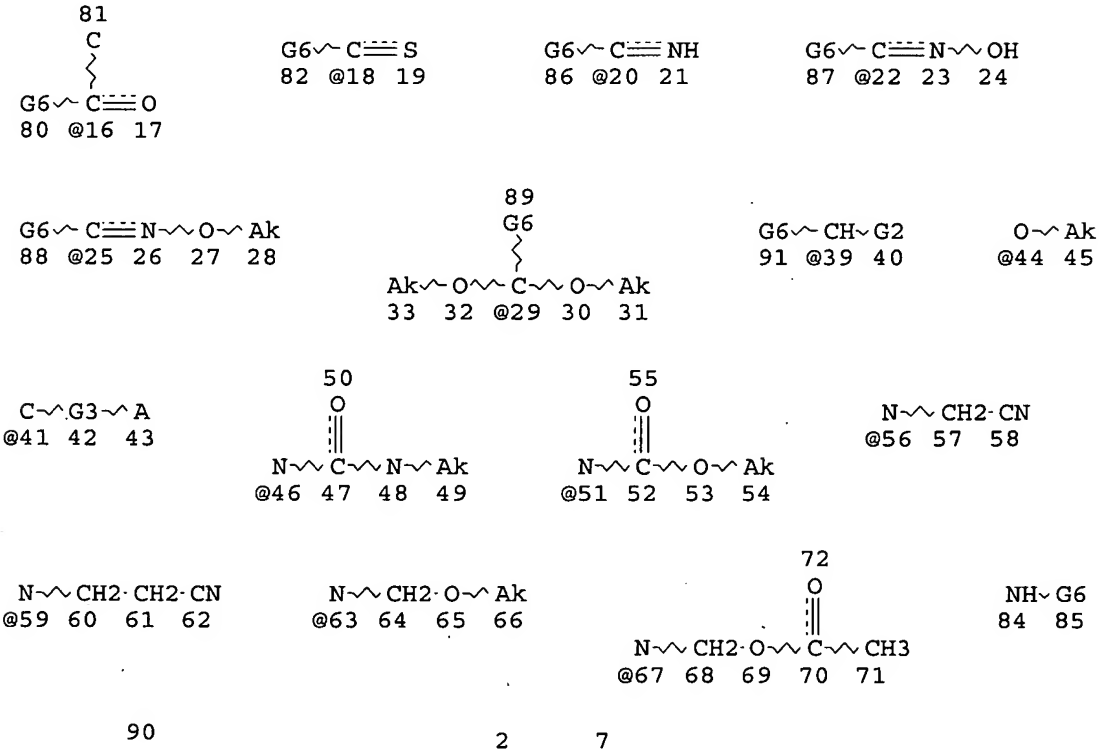

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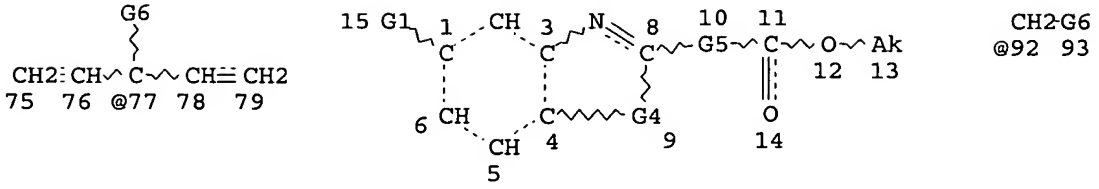

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VAR G6=CY/41
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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

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RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 94

STEREO ATTRIBUTES: NONE
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L19 21 SEA FILE=HCAPLUS ABB=ON PLU=ON L18

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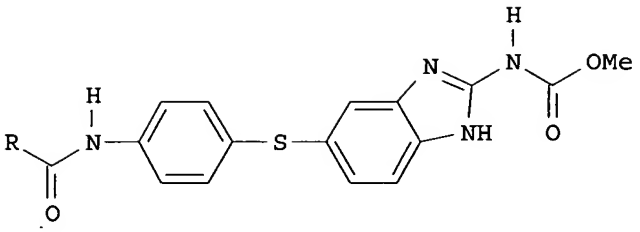
=> d ibib abs hitstr l19 1-21

L19 ANSWER 1 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:94095 HCAPLUS
DOCUMENT NUMBER: 141:207117
TITLE: Reaction of methyl 5(6)-(4-aminophenylthio)-2-benzimidazolylcarbamate with carboxylic acid chlorides
AUTHOR(S): Pilyugin, V. S.; Mikhailyuk, A. N.; Kosareva, V. M.; Chikisheva, G. E.; Klimakova, E. V.; Vorob'eva, T. P.
CORPORATE SOURCE: Research Technological Institute of Gerbicides and Growth Regulators, Academy of Sciences of Bashkortostan, Ufa, Russia
SOURCE: Russian Journal of General Chemistry (Translation of Zhurnal Obshchei Khimii) (2003), 73(9), 1457-1462
CODEN: RJGCEK; ISSN: 1070-3632
PUBLISHER: MAIK Nauka/Interperiodica Publishing
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 141:207117
GI



I

AB Me 5(6)-(4-aminophenylthio)-2-benzimidazolylcarbamate was reacted with carboxylic acid chlorides RCOCl (R = n-Pr, cyclohexyl, 2-BrC6H4, 4-pyridyl, etc.) to obtain mono- and disubstitution products, I (R1 = H, COR, resp.). The formation of the former involves the aniline nitrogen and of the latter, both the aniline and benzimidazole nitrogens. The toxicity and anthelmintic properties of the products are studied.

IT **209803-92-9P 209803-93-0P 209803-94-1P**
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of mono- and diacyl [(aminophenyl)thio]benzimidazolylcarbamate derivs., their toxicity and anthelmintic activity)

RN 209803-92-9 HCAPLUS
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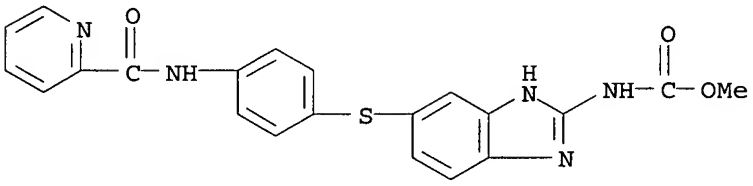
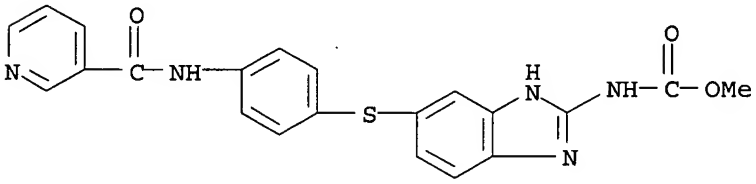
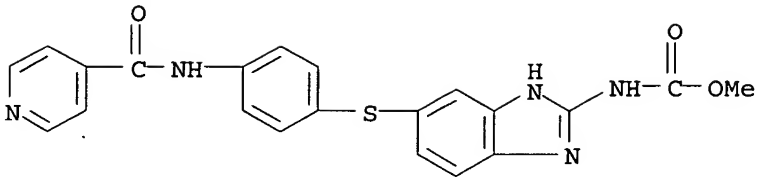


RN 209803-93-0 HCAPLUS
CN Carbamic acid, [5-[[4-[(3-pyridinylcarbonyl)amino]phenyl]thio]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



RN 209803-94-1 HCAPLUS
CN Carbamic acid, [5-[[4-[(4-pyridinylcarbonyl)amino]phenyl]thio]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 2 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:428885 HCAPLUS
DOCUMENT NUMBER: 137:6179
TITLE: Preparation of benzimidazoles as TIE-2 and/or VEGFR2 inhibitors
INVENTOR(S): Cheung, Mui; Harris, Philip Anthony; Hasegawa, Masaichi; Ida, Satoru; Kano, Kazuya; Nishigaki, Naohiko; Sato, Hideyuki; Veal, James Martin; Washio, Yoshiaki; West, Rob I.
PATENT ASSIGNEE(S): Glaxo Group Limited, UK; Glaxosmithkline K.K.
SOURCE: PCT Int. Appl., 217 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002044156	A2	20020606	WO 2001-US44553	20011128
WO 2002044156	A3	20021017		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002032439	A5	20020611	AU 2002-32439	20011128
EP 1341771	A2	20030910	EP 2001-991963	20011128
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004517080	T2	20040610	JP 2002-546526	20011128
US 2004082583	A1	20040429	US 2003-433128	20031112
PRIORITY APPLN. INFO.:			US 2000-253868P P	20001129
			US 2001-310939P P	20010808
			WO 2001-US44553 W	20011128

OTHER SOURCE(S): MARPAT 137:6179
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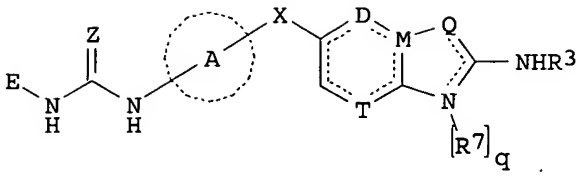

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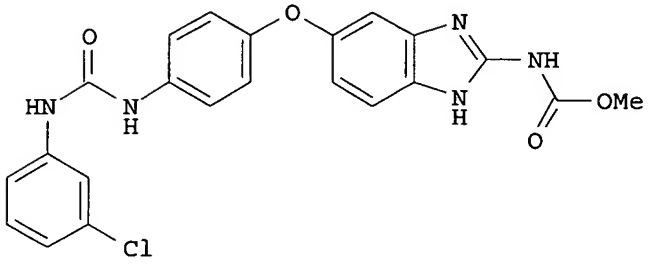


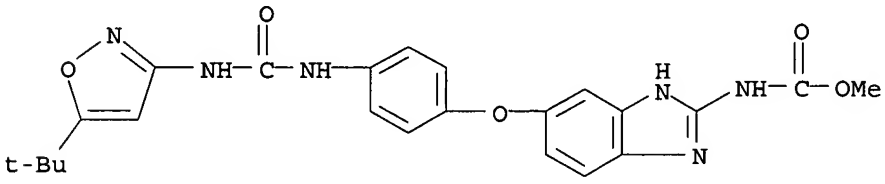
II

AB The title compds. [I; E = (un)substituted aryl, heteroaryl; A = aryl, heteroaryl, heterocyclyl; X = S, O, SO2, SO, CH2, CHOH, CO; Z = O, S; p = 0-1; q = 0-1; D = CH, T = CR8, M = C and Q = NT7p, wherein p = 0 and q = 1; or D = CH, T = CR8, M = C and Q = NR7p, wherein p =1 and q = 0, or D = CH, T = CR8, M = C and Q = S or O, wherein q = 0; or D = N, T = CR8, M = C and Q = NR7p, wherein either p or q = 0 and the other = 1; or D = CH, T = N, M = C and Q = NR7p, wherein either p or q = 0 and the other = 1; or D = CH, T = CR8, M = N and Q = CH, wherein q = 0; R1 = alkyl, haloalkyl, aryl, etc.; R2 = H, alkyl, aryl, etc.; R3 = alkylene or alkylene substituted by oxo, and is linked together with N atom to which it is attached and to one of the benzimidazole N atoms to form a heterocyclic compound fused to the benzimidazole; R7 = H, alkyl, etc.; R8 = H, halo] and their salts, useful in the treatment of hyperproliferative diseases, were prepared Thus, reacting Me [5-(4-aminophenoxy)-1H-benzimidazol-2-yl]carbamate (preparation given) with 3-chlorophenyl isocyanate in THF afforded 69% II which showed pIC50 of > 7.0 in TIE-2 and VEGFR2 enzyme assays.

IT **433225-31-1P 433225-32-2P 433225-33-3P 433225-34-4P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of benzimidazoles as TIE-2 and/or VEGFR2 inhibitors)

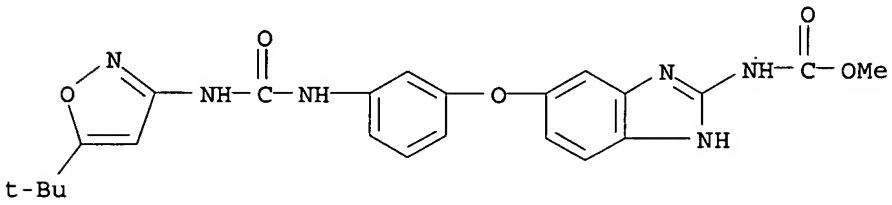
RN 433225-31-1 HCAPLUS

CN Carbamic acid, [5-[4-[[[[5-(1,1-dimethylethyl)-3-isoxazolyl]amino]carbonyl]amino]phenoxy]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)

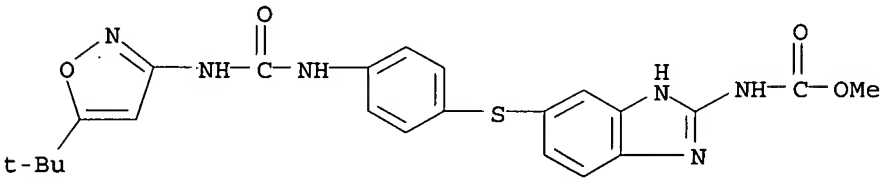


RN 433225-32-2 HCAPLUS

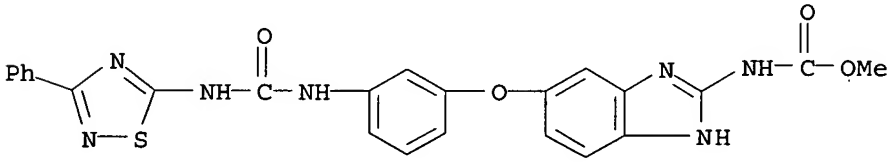
CN Carbamic acid, [5-[3-[[[[5-(1,1-dimethylethyl)-3-isoxazolyl]amino]carbonyl]amino]phenoxy]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



RN 433225-33-3 HCAPLUS
CN Carbamic acid, [5-[[4-[[[[5-(1,1-dimethylethyl)-3-isoxazolyl]amino]carbonyl]amino]phenyl]thio]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



RN 433225-34-4 HCAPLUS
CN Carbamic acid, [5-[3-[[[(3-phenyl-1,2,4-thiadiazol-5-yl)amino]carbonyl]amino]phenoxy]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



L19 ANSWER 3 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:408648 HCAPLUS
DOCUMENT NUMBER: 137:6176
TITLE: Preparation of aromatic acid derivatives useful as serine protease inhibitors
INVENTOR(S): Bisacchi, Gregory S.; Sutton, James C., Jr.; Slusarchyk, William A.; Treuner, Uwe D.; Zhao, Guohua; Cheney, Daniel L.; Wu, Shung C.; Shi, Yan
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
SOURCE: PCT Int. Appl., 182 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2002042273	A2	20020530	WO 2001-US46884		20011107
WO 2002042273	A3	20020829			
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CA 2428191	AA	20020530	CA 2001-2428191		20011107
AU 2002027269	A5	20020603	AU 2002-27269		20011107
EP 1332131	A2	20030806	EP 2001-996145		20011107
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JP 2004514669	T2	20040520	JP 2002-544409		20011107
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			WO 2001-US46884	W	20011107

OTHER SOURCE(S): MARPAT 137:6176

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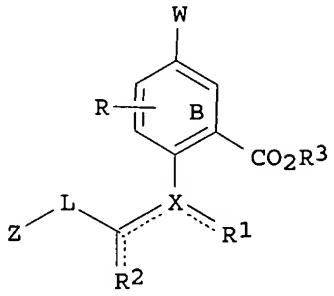

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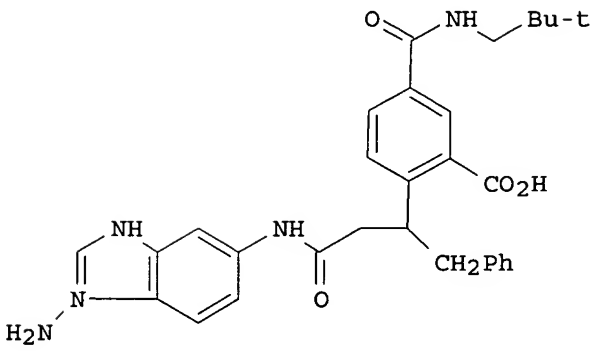


II

AB Aromatic compds. I, are useful as serine protease inhibitors, wherein ring B is Ph or pyridyl; W is amide, alkyl, alkenyl, heterocycle, heteroaryl, aryl, cycloalkyl; L is a linker group; X is N, CH, or C, provided that X is C when R1 and R2 join to form a fully unsatd. ring; Z is an optionally-substituted monocyclic or bicyclic ring system; R is H, alkoxy,

amine, alkyl, alkenyl, halogen, haloalkyl, cyano, nitro, alkylthio, CHO, acyl, CO2H, alkoxycarbonyl, sulfonamido, sulfonyl, Ph; R1 and R2 (i) are independently selected from hydrogen, alkyl, alkenyl, heteroaryl, aryl, heterocycle, and cycloalkyl; or (ii) are taken together to form an aryl, heteroaryl, cycloalkyl, or heterocycle, provided that R1 and R2 do not together form pyrazole when W is methoxy and Z is biphenyl; and when R1 and R2 individually or together form a heteroaryl, aryl, heterocycle, cycloalkyl; R3 is hydrogen, alkyl, substituted alkyl, heteroaryl, aryl, heterocycle, cycloalkyl, or alkyl substituted with -OC(O)R4 or -OC(O)OR4, wherein R4 is alkyl, cycloalkyl, provided that R3 is not Ph when W is methoxy. Thus, II was prepared for treating a coagulation-associated disorder, an inflammatory or immune disease, or metastases (no data). Included within the scope of the invention are pharmaceutical compns. for treating a serine protease disease, an inflammatory or immune condition, or cancer.

IT **431052-40-3P 431053-42-8P**

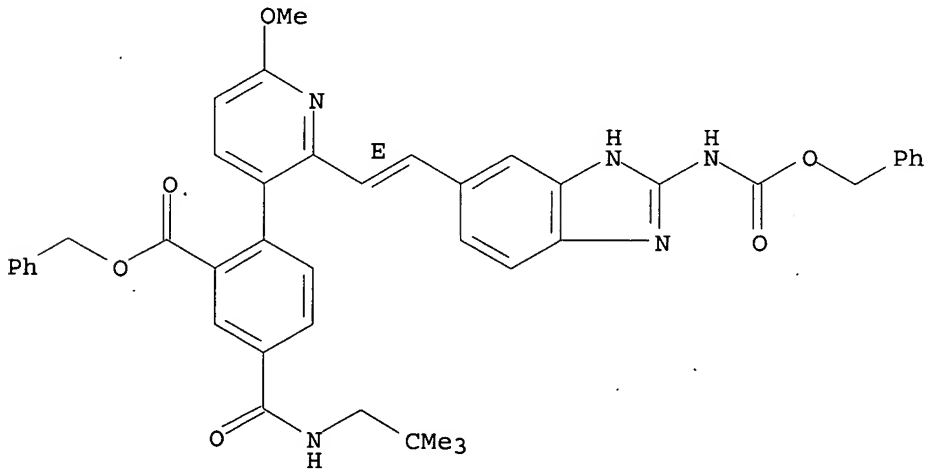
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of aromatic acid derivs. useful as anti-inflammatory, anticoagulant, antitumor, immunomodulator agents and serine protease inhibitors)

RN 431052-40-3 HCAPLUS

CN Benzoic acid, 5-[[(2,2-dimethylpropyl)amino]carbonyl]-2-[6-methoxy-2-[(1E)-2-[2-[[(phenylmethoxy)carbonyl]amino]-1H-benzimidazol-5-yl]ethenyl]-3-pyridinyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

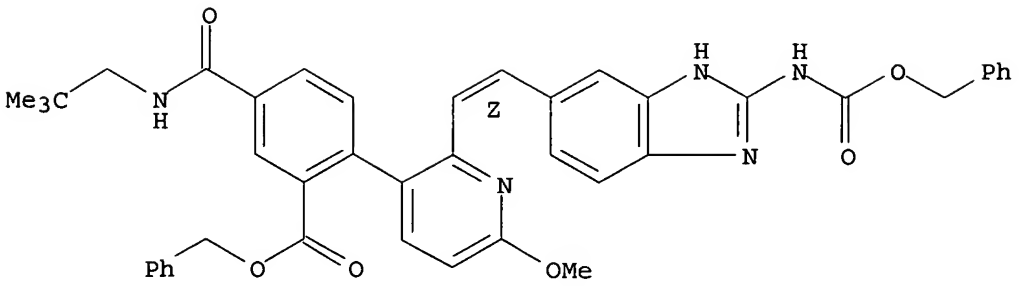
Double bond geometry as shown.



RN 431053-42-8 HCAPLUS

CN Benzoic acid, 5-[[(2,2-dimethylpropyl)amino]carbonyl]-2-[6-methoxy-2-[(1Z)-2-[2-[[(phenylmethoxy)carbonyl]amino]-1H-benzimidazol-5-yl]ethenyl]-3-pyridinyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L19 ANSWER 4 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:769109 HCAPLUS
DOCUMENT NUMBER: 133:322130
TITLE: Synthesis of benzo-fused heterocyclic sulfonyl chlorides for preparation of amino acid hydroxyethylamine sulfonamide retroviral protease inhibitors
INVENTOR(S): Kunda, Sastry A.; Letendre, Leo J.; De Crescenzo, Gary A.
PATENT ASSIGNEE(S): G.D. Searle and Co., USA
SOURCE: U.S., 95 pp., Cont.-in-part of U.S. 5,756,533.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6140505	A	20001031	US 1998-80928	19980519
US 5756533	A	19980526	US 1995-474052	19950607
EP 1258491	A1	20021120	EP 2002-11526	19960307
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI				
WO 9959989	A1	19991125	WO 1999-US7047	19990518
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AU 9938604	A1	19991206	AU 1999-38604	19990518
US 6310080	B1	20011030	US 1999-451920	19991201
US 2002111368	A1	20020815	US 2001-836443	20010418
US 6458785	B2	20021001		
US 2003216435	A1	20031120	US 2002-200589	20020723
US 6730669	B2	20040504		
US 2004260095	A1	20041223	US 2004-760125	20040120
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			US 1995-474052 A2	19950607
			US 1995-391873 B2	19950222
			EP 1996-907135 A3	19960307
			US 1998-80928 A1	19980519

WO 1999-US7047	W	19990518
US 1999-451920	A3	19991201
US 2001-836443	A1	20010418
US 2002-200589	A1	20020723

OTHER SOURCE(S): CASREACT 133:322130; MARPAT 133:322130

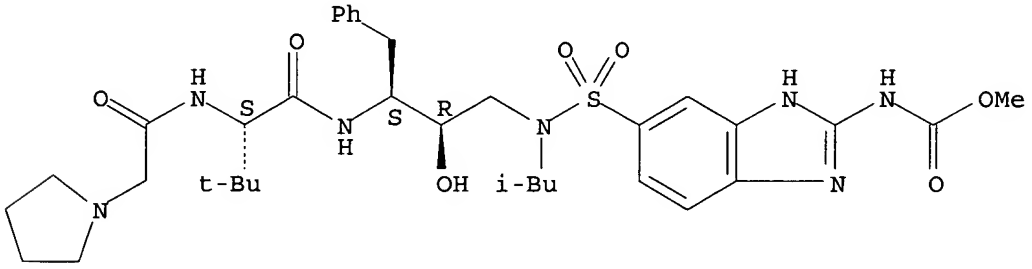
AB Benzo-fused heterocyclic sulfonyl halides for the preparation of amino acid hydroxyethylamine sulfonamide retroviral protease inhibitors were obtained by a process comprising reacting a benzo-fused heterocyclic compound with an SO3 complex in the presence of a water immiscible, non-reactive solvent at 0-75°, cooling, if necessary, to a temperature of from about -25° to about 65° and then adding oxalyl halide. Thus, N-[2R-hydroxy-3-[[(1,3-benzodioxol-5-yl)sulfonyl](2-methylpropyl)amino]-1S-(phenylmethyl)propyl]-2S-[(pyrrolidin-1-yl)acetylamino]-3,3-dimethylbutanamide was prepared and shown to be an effective HIV protease inhibitor (IC50 = 3 nM, EC50 = 7 nM).

IT **183594-99-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis of benzo-fused heterocyclic sulfonyl chlorides for preparation of amino acid hydroxyethylamine sulfonamide retroviral protease inhibitors)

RN 183594-99-2 HCAPLUS

CN Carbamic acid, [5-[[(2R,3S)-[3-[[(2S)-3,3-dimethyl-1-oxo-2-[(1-pyrrolidinylacetyl)amino]butyl]amino]-2-hydroxy-4-phenylbutyl](2-methylpropyl)amino]sulfonyl]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 5 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:	1999:811207 HCAPLUS
DOCUMENT NUMBER:	132:49801
TITLE:	Preparation of 1-acylamino-3-(N-arylsulfonyl-N-alkoxyamino)-2-hydroxypropanes and related compounds as inhibitors of HIV aspartyl protease.
INVENTOR(S):	Sherrill, Ronald George; Hale, Michael R.; Spaltenstein, Andrew; Furfine, Eric Steven; Andrews, Clarence Webster, III; Lowen, Gregory Thomas
PATENT ASSIGNEE(S):	Vertex Pharmaceuticals Incorporated, USA
SOURCE:	PCT Int. Appl., 344 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9965870	A2	19991223	WO 1999-US13744	19990617
WO 9965870	A3	20010315		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2335477	AA	19991223	CA 1999-2335477	19990617
AU 9945760	A1	20000105	AU 1999-45760	19990617
AU 767728	B2	20031120		
EP 1086076	A1	20010328	EP 1999-928769	19990617
EP 1086076	B1	20041222		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9912169	A	20010410	BR 1999-12169	19990617
NZ 508855	A	20031031	NZ 1999-508855	19990617
AT 285396	E	20050115	AT 1999-928769	19990617
US 2002049201	A1	20020425	US 2000-731129	20001206
US 6613743	B2	20030902		
NO 2000006405	A	20010219	NO 2000-6405	20001215
US 2004097594	A1	20040520	US 2003-600937	20030620
NZ 528074	A	20041126	NZ 2003-528074	20030908
PRIORITY APPLN. INFO.:			US 1998-90094P	P 19980619
			WO 1999-US13744	W 19990617
			US 2000-731129	A3 20001206

OTHER SOURCE(S): MARPAT 132:49801

AB ABxN(Gx)CHDCHOR7CH2ND'SO2E [A = H, (substituted) Ht, R1Ht, R1Ak; Ak = alkyl; Ht = cycloalkyl, cycloalkenyl, (substituted) aryl, heterocyclyl; R1 = CO, SO2, COCO, O2C, NR2CO, NR2SO2, etc.; B = null, NR2C(R3)2CO; x = 0, 1; R2 = H, (substituted) Ht, alkyl; R3 = H, (substituted) Ht, alkyl, alkenyl, cycloalkyl, cycloalkenyl; G = null, H, R7, alkyl; G may be bound to R7; D = (substituted) Q, alkyl, alkenyl; Q = (substituted) carbocyclyl, heterocyclyl; D' = OR10, N:R10, N(R10)R1R3; E = Ht, OHt, OR3, NR2R3, (substituted) alkyl, alkenyl, etc.; R7 = H, (CH2O)xY(ZM)(:X)Z(M)x, etc.; M = null, H, Li, Na, K, Mg, Ca, Ba, alkyl, alkenyl, etc.; X = O, S; Y = P, S; Z = O, S, N(R2)2, H], were prepared as inhibitors of HIV aspartyl protease (no data). Thus, 3-H2NC6H4SO2NHOCHMe2 (preparation given), tert-Bu N-(1S)-1-[(2S)-oxiran-2-yl]-2-phenylethylcarbamate, and phosphazene base P4 tert-Bu were stirred in 8 h in THF to give 95% tert-Bu N-(1S,2R)-3-[[(3-aminophenyl)sulfonyl](isopropoxy)amino]-1-benzyl-2-hydroxypropylcarbamate.

IT **252871-34-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 1-acylamino-3-(N-arylsulfonyl-N-alkoxyamino)-2-hydroxypropanes and related compds. as inhibitors of HIV aspartyl protease)

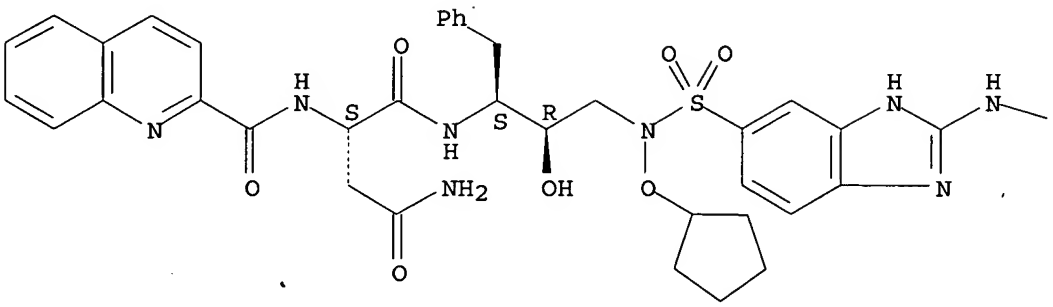
RN 252871-34-4 HCAPLUS

CN Carbamic acid, [5-[[[(2R,3S)-3-[[(2S)-4-amino-1,4-dioxo-2-[(2-quinolinylcarbonyl)amino]butyl]amino]-2-hydroxy-4-phenylbutyl](cyclopentyloxy)amino]sulfonyl]-1H-benzimidazol-2-yl]-, methyl

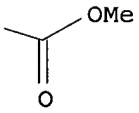
ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

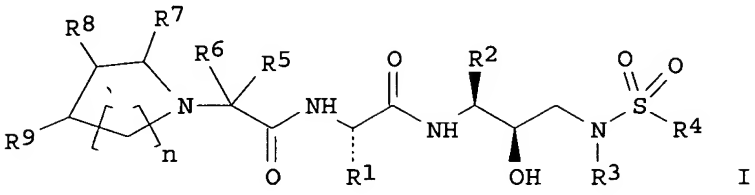


L19 ANSWER 6 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:753229 HCAPLUS
DOCUMENT NUMBER: 132:6692
TITLE: benzo fused heterocyclo sulfonyl halide intermediates for the preparation of amino acids as HIV protease inhibitors
INVENTOR(S): Kunda, Sastry A.; Letendre, Leo J.; De Crescenzo, Gary A.
PATENT ASSIGNEE(S): G.D. Searle and Co., USA
SOURCE: PCT Int. Appl., 221 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9959989	A1	19991125	WO 1999-US7047	19990518
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6140505	A	20001031	US 1998-80928	19980519
AU 9938604	A1	19991206	AU 1999-38604	19990518

US 2002111368	A1	20020815	US 2001-836443	20010418
US 6458785	B2	20021001		
PRIORITY APPLN. INFO.:			US 1998-80928	A1 19980519
			US 1995-402287	B2 19950310
			US 1995-474052	A2 19950607
			WO 1999-US7047	W 19990518
			US 1999-451920	A3 19991201

OTHER SOURCE(S): MARPAT 132:6692
GI



I

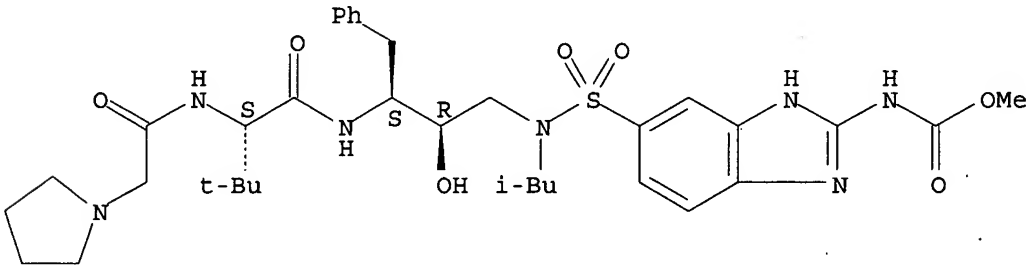
AB Sulfonyl amino acids I (R1 = alkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, cyanoalkyl, imidazolylmethyl, CH2CONH2, CH2CH2CONH2, CH2SO2NH2, CH2SMe, Ch2SOMe, Ch2SO2Me, CMe2SMe, CMeSOMe; R2 = alkyl, alkylthioalkyl, arylthioalkyl, cycloalkyl; R3 = alkyl, cycloalkyl, cycloalkylalkyl; R4 = substituted heterocycle, R5 = H, alkyl, hydroxyalkyl, alkoxyalkyl; R6 = H, alkyl, hydroxyalkyl, alkoxyalkyl, alkylamide, sulfone, alkylthioalkyl; R7-R9 = H, substituted heteroaryl, benzo) were prepared as HIV protease inhibitors. Process for preparing a benzo fused heterocyclo sulfonyl halide intermediate, comprising reacting a benzo fused heterocyclic compound with a -SO3- complex in the presence of a solvent and then adding oxalyl halide. Thus, amino acid I (R1 = CHMeEt, R2 = Bn, R3 = CH2CHMe3, R4 = Ph, R5-E9 = H, n = 1) was prepared and tested as HIV protease inhibitor (IC50 = 4 nM).

IT **183594-99-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(benzo fused heterocyclo sulfonyl halide intermediates for the preparation of amino acids as HIV protease inhibitors)

RN 183594-99-2 HCAPLUS

CN Carbamic acid, [5-[[(2R,3S)-[3-[[(2S)-3,3-dimethyl-1-oxo-2-[(1-pyrrolidinylacetyl)amino]butyl]amino]-2-hydroxy-4-phenylbutyl](2-methylpropyl)amino]sulfonyl]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

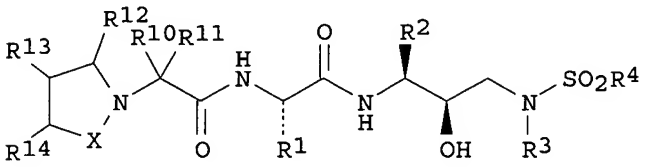
L19 ANSWER 7 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:671016 HCAPLUS
DOCUMENT NUMBER: 131:286828
TITLE: Preparation of amino acid hydroxyethylamino sulfonamides as retroviral protease inhibitors
INVENTOR(S): Getman, Daniel P.; Decrescenzo, Gary A.; Freskos, John N.; Vazquez, Michael L.; Sikorski, James A.; Devadas, Balekudru; Nagarajan, Srinivasan R.; Brown, David L.; McDonald, Joseph J.
PATENT ASSIGNEE(S): G.D. Searle and Co., USA
SOURCE: U.S., 96 pp., Cont.-in-part of U.S. Ser. No. 402,287, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5968970	A	19991019	US 1998-894900	19980102
WO 9628463	A1	19960919	WO 1996-US2684	19960307
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA				
EP 1258491	A1	20021120	EP 2002-11526	19960307
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI				
US 2002111368	A1	20020815	US 2001-836443	20010418
US 6458785	B2	20021001		

PRIORITY APPLN. INFO.:

US 1995-402287	B2	19950310
WO 1996-US2684	W	19960307
US 1995-474052	A2	19950607
EP 1996-907135	A3	19960307
US 1999-451920	A3	19991201

OTHER SOURCE(S): MARPAT 131:286828
GI



I

AB Amino acid hydroxyethylamino sulfonamide compds. I [X = CH2, CH2CH2; R1 = alkyl, alkenyl, alkynyl, hydroxy-, alkoxy-, or cyanoalkyl, imidazolylmethyl, CH2CONH2, CH2CH2CONH2, CH2SO2NH2, CH2SMe, CH2S(O)Me, CH2SO2Me, CMe2SMe, CMe2S(O)Me, CMe2SO2Me; R2 = alkyl, aralkyl,

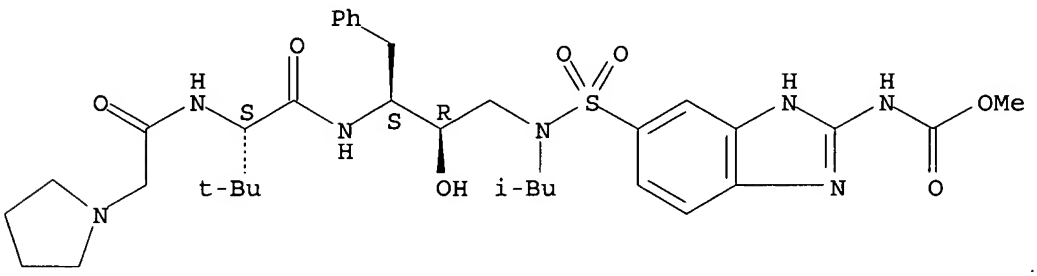
alkylthioalkyl, arylthioalkyl, cycloalkylalkyl; R3 = alkyl, cycloalkyl, cycloalkylmethyl; R4 = aryl, benzo-fused heteroaryl or heterocyclyl; R10 = H, alkyl, hydroxy- or alkoxyalkyl; R11 = H, alkyl, hydroxyalkyl, alkoxyalkyl, benzyl, imidazolylmethyl, CH2CH2CONH2, CH2CONH2, CH2CH2SMe, CH2SMe, CH2S(O)Me, CH2SO2Me; R12 = H, hydroxyalkyl, alkoxyalkyl; R13, R14 = H, OH, alkoxy, 2-hydroxyethoxy, hydroxyalkyl, or alkoxyalkyl or R13 and R14 together form (un)substituted benzo or heteroaryl] or their pharmaceutically acceptable salts, prodrugs, or esters were prepared as retroviral protease inhibitors. Thus, 2S-(pyrrolidinoacetamido)-N-[2R-hydroxy-3-[N1-(2-methylpropyl)-N1-(2,3-dihydrobenzofuran-5-ylsulfonyl)amino]-1S-(phenylmethyl)propyl]-3S-methylpentanamide was prepared and showed IC50 = 2 nM for inhibition of HIV protease.

IT **183594-99-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of amino acid hydroxyethylamino sulfonamides as retroviral protease inhibitors)

RN 183594-99-2 HCAPLUS

CN Carbamic acid, [5-[[(2R,3S)-[3-[[(2S)-3,3-dimethyl-1-oxo-2-[(1-pyrrolidinylacetyl)amino]butyl]amino]-2-hydroxy-4-phenylbutyl](2-methylpropyl)amino]sulfonyl]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 8 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:392091 HCAPLUS
DOCUMENT NUMBER: 129:41411
TITLE: Preparation of amino acid hydroxyethylamino sulfonamide retroviral protease inhibitors
INVENTOR(S): Getman, Daniel P.; Decrescenzo, Gary A.; Freskos, John N.; Vazquez, Michael L.; Sikorski, James A.; Devadas, Balekudru; Nagarajan, Srinivasan; Brown, David L.; McDonald, Joseph J.
PATENT ASSIGNEE(S): G.D. Searle and Co., USA
SOURCE: U.S., 93 pp., Cont.-in-part of U. S. Ser. No. 402,287, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

US 5756533	A	19980526	US 1995-474052	19950607
CA 2215061	AA	19960919	CA 1996-2215061	19960307
WO 9628463	A1	19960919	WO 1996-US2684	19960307
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA				
AU 9650294	A1	19961002	AU 1996-50294	19960307
AU 705268	B2	19990520		
EP 813542	A1	19971229	EP 1996-907135	19960307
EP 813542	B1	20021016		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI				
CN 1186499	A	19980701	CN 1996-193620	19960307
JP 2001513746	T2	20010904	JP 1996-527648	19960307
AT 226213	E	20021115	AT 1996-907135	19960307
EP 1258491	A1	20021120	EP 2002-11526	19960307
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI				
PL 184748	B1	20021231	PL 1996-322784	19960307
PT 813542	T	20030131	PT 1996-907135	19960307
ES 2187640	T3	20030616	ES 1996-907135	19960307
EE 4349	B1	20040816	EE 1997-201	19960307
NO 9704148	A	19971027	NO 1997-4148	19970909
US 5965601	A	19991012	US 1998-33897	19980303
US 6140505	A	20001031	US 1998-80928	19980519
US 6310080	B1	20011030	US 1999-451920	19991201
US 2002111368	A1	20020815	US 2001-836443	20010418
US 6458785	B2	20021001		
US 2003216435	A1	20031120	US 2002-200589	20020723
US 6730669	B2	20040504		
US 2004260095	A1	20041223	US 2004-760125	20040120

PRIORITY APPLN. INFO.:	US 1995-402287	B2 19950310
	US 1995-391873	B2 19950222
	US 1995-474052	A 19950607
	EP 1996-907135	A3 19960307
	WO 1996-US2684	W 19960307
	US 1998-80928	A1 19980519
	US 1999-451920	A3 19991201
	US 2001-836443	A1 20010418
	US 2002-200589	A1 20020723

OTHER SOURCE(S): MARPAT 129:41411

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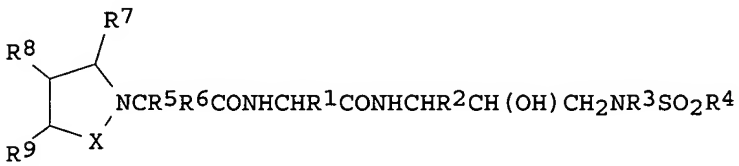


I

AB Amino acid hydroxyethylamino sulfonamide compds. I (X = CH2 or CH2CH2; R1 = alkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, cyanoalkyl, imidazolylmethyl, CH2CONH2, CH2CH2CONH2, CH2SMe, CMe2SMe or their sulfone

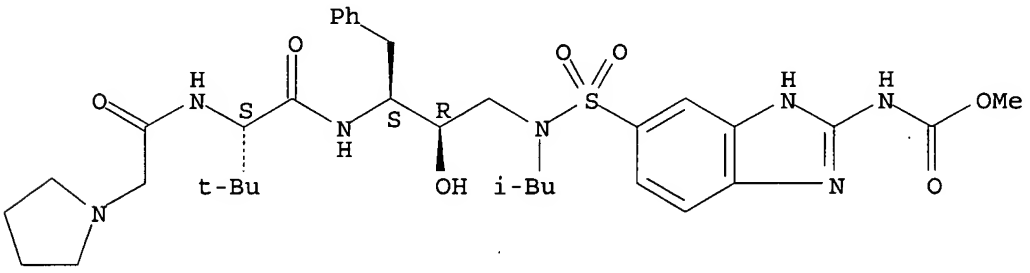
or sulfoxide derivative; R2 = alkyl, aralkyl, alkylthioalkyl, arylthioalkyl, cycloalkylalkyl; R3 = alkyl, cycloalkyl, cycloalkylmethyl; R4 = aryl, benzo-fused heteroaryl or heterocyclyl; R5 = H, alkyl, hydroxyalkyl, alkoxyalkyl; R6 = H, alkyl, hydroxyalkyl, alkoxyalkyl, benzyl, imidazolylmethyl, CH2CONH2, CH2CH2CONH2, CH2CH2SMe, CH2SMe or their sulfone or sulfoxide derivs.; R7 = H, hydroxyalkyl, alkoxyalkyl; R8, R9 = H, OH, alkoxy, 2-hydroxyethoxy, hydroxyalkyl, alkoxyalkyl; or R7 and R8 or R8 and R9 form a heteroaryl or benzo radical) were prepared as retroviral protease inhibitors. Thus, 2S-[(pyrrolidin-1-yl)acetylamino]-N-[2R-hydroxy-3-[N1-(2-methylpropyl)-N1-(2,3-dihydrobenzofuran-5-ylsulfonyl)amino]-1S-(phenylmethyl)propyl]-3S-methylpentanamide, prepared from N-[3S-benzyloxycarbonylamino-2R-hydroxy-4-phenylbutyl]-N-isobutylamine, tert-Bu bromoacetate, pyrrolidine, and 2,3-dihydrofuran, showed HIV protease inhibitory activity IC50 = 2 nM.

IT **183594-99-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of amino acid hydroxyethylamino sulfonamide retroviral protease inhibitors)

RN 183594-99-2 HCAPLUS

CN Carbamic acid, [5-[[(2R,3S)-[3-[[(2S)-3,3-dimethyl-1-oxo-2-[(1-pyrrolidinylacetyl)amino]butyl]amino]-2-hydroxy-4-phenylbutyl](2-methylpropyl)amino]sulfonyl]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

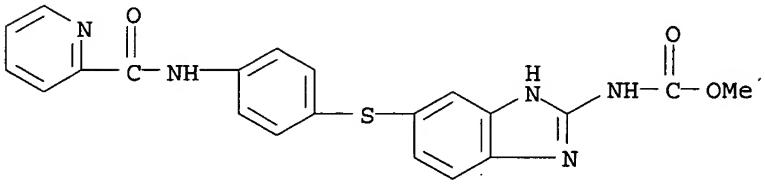
L19 ANSWER 9 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:342251 HCAPLUS
DOCUMENT NUMBER: 129:103768
TITLE: Relations between the structure and embryotoxic action of nitrogen- and sulfur-containing organic compounds
AUTHOR(S): Tyurina, L. A.; Zul'karnaev, T. R.; Solominova, T. S.; Tyurin, A. A.; Shaimukhametova, R. Kh.; Pilyugin, V. S.; Khaliullin, F. A.
CORPORATE SOURCE: Nauchno-Issled. Tekhnol. Inst. Gerbitsidov i Regulyatorov Rosta Rastenii, Ufa, Russia
SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1998), 32(2), 21-27
CODEN: KHFZAN; ISSN: 0023-1134
PUBLISHER: Izdatel'stvo Folium
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB The authors presented the results of the anal. of the structure-

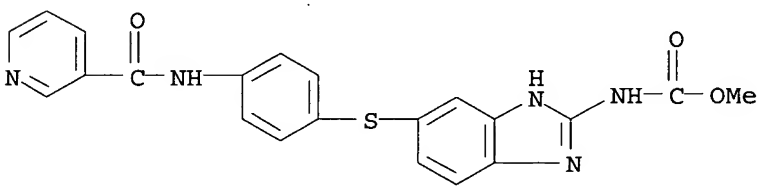
embryotoxicity relationships based on the use of the computer program SARD. Preparation of the novel anthelmintic biphen (VK-40) is described.

IT **209803-92-9 209803-93-0 209803-94-1**
RL: ADV (Adverse effect, including toxicity); PRP (Properties); BIOL (Biological study)
(relations between the structure and embryotoxic action of nitrogen- and sulfur-containing organic compds.)

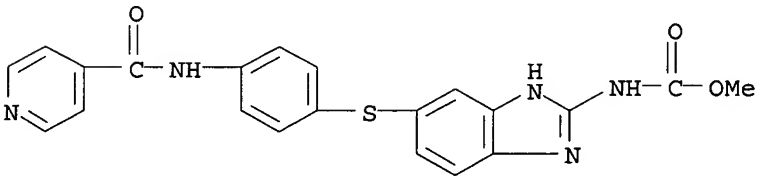
RN 209803-92-9 HCAPLUS
CN Carbamic acid, [5-[[4-[(2-pyridinylcarbonyl)amino]phenyl]thio]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



RN 209803-93-0 HCAPLUS
CN Carbamic acid, [5-[[4-[(3-pyridinylcarbonyl)amino]phenyl]thio]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



RN 209803-94-1 HCAPLUS
CN Carbamic acid, [5-[[4-[(4-pyridinylcarbonyl)amino]phenyl]thio]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



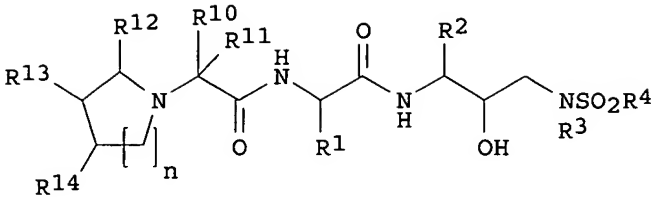
L19 ANSWER 10 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1996:748344 HCAPLUS
DOCUMENT NUMBER: 126:19331
TITLE: Preparation of peptide hydroxyethylaminosulfonamide analogs as retroviral protease inhibitors.
INVENTOR(S): Getman, Daniel P.; Decrescenzo, Gary A.; Freskos, John N.; Vazquez, Michael L.; Sikorski, James A.; Devadas, Balekudru; Nagarajan, Srinivasan; Brown, David L.; Mcdonald, Joseph J.
PATENT ASSIGNEE(S): G.D. Searle and Co., USA

SOURCE: PCT Int. Appl., 212 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9628463	A1	19960919	WO 1996-US2684	19960307
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA				
US 5756533	A	19980526	US 1995-474052	19950607
AU 9650294	A1	19961002	AU 1996-50294	19960307
AU 705268	B2	19990520		
EP 813542	A1	19971229	EP 1996-907135	19960307
EP 813542	B1	20021016		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI				
BR 9607638	A	19980526	BR 1996-7638	19960307
JP 2001513746	T2	20010904	JP 1996-527648	19960307
AT 226213	E	20021115	AT 1996-907135	19960307
EP 1258491	A1	20021120	EP 2002-11526	19960307
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI				
PL 184748	B1	20021231	PL 1996-322784	19960307
EE 4349	B1	20040816	EE 1997-201	19960307
NO 9704148	A	19971027	NO 1997-4148	19970909
US 5968970	A	19991019	US 1998-894900	19980102
US 2002111368	A1	20020815	US 2001-836443	20010418
US 6458785	B2	20021001		

PRIORITY APPLN. INFO.:	US 1995-402287	A2	19950310
	US 1995-474052	A2	19950607
	EP 1996-907135	A3	19960307
	WO 1996-US2684	W	19960307
	US 1999-451920	A3	19991201

OTHER SOURCE(S): MARPAT 126:19331
GI



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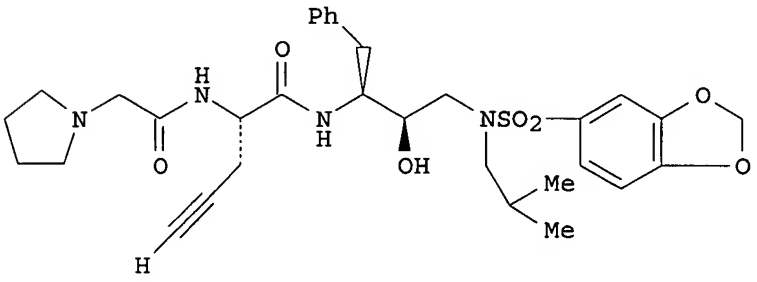


II

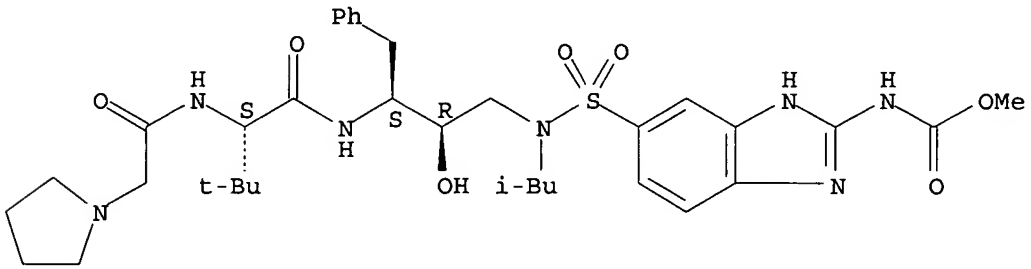
AB Title compds. (I; n = 1, 2; R1 = alkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl,, cyanoalkyl, imidazolylalkyl, CH2CONH2, CH2SOMe, etc.; R2 = alkyl, aralkyl, alkylthioalkyl, arylthioalkyl, cycloalkylalkyl; R3 = alkyl, cycloalkyl, cycloalkylmethyl; R4 = aryl, benzoheteroaryl; R10 = H, alkyl, hydroxyalkyl, alkoxyalkyl; R11 = H, alkyl, hydroxyalkyl, alkoxyalkyl, PhCH2, imidazolylmethyl, CH2CH2CONH2, CH2CH2SMe, etc.; R12 = H, hydroxyalkyl, alkoxyalkyl; R13, R14 = H, OH, alkoxy, 2-hydroxyethoxy, hydroxyalkyl, alkoxyalkyl; R12R13, R13R14 = atoms to form 5-6 membered heteroaryl or benzo rings), were prepared Thus, title compound (II), prepared by solution phase means, inhibited HIV protease with IC50 = 2 nM.

IT **183594-99-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of amino acid hydroxyethylaminosulfonamide retroviral protease inhibitors)

RN 183594-99-2 HCAPLUS

CN Carbamic acid, [5-[[(2R,3S)-[3-[[(2S)-3,3-dimethyl-1-oxo-2-[(1-pyrrolidinylacetyl)amino]butyl]amino]-2-hydroxy-4-phenylbutyl](2-methylpropyl)amino]sulfonyl]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



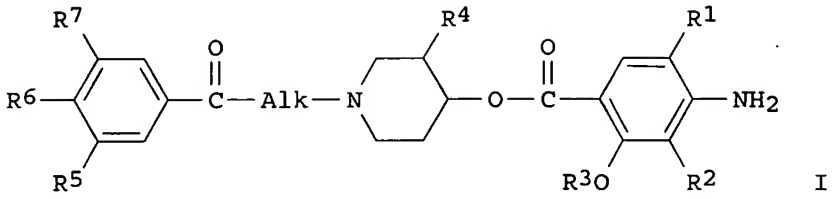
L19 ANSWER 11 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:434930 HCAPLUS
DOCUMENT NUMBER: 125:86511
TITLE: Preparation of 1-benzoylalkyl-4-piperidinyl benzoate derivatives for treatment of intestinal disorders involving a decreased colon motility
INVENTOR(S): Van Daele, Georges Henri Paul D.; Bosmans, Jean-Paul Rene Marie A.; Verdonck, Marc Gustaaf Celine
PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg.
SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9610026	A1	19960404	WO 1995-EP3690	19950919
W: AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, HU, IS, JP, KE, KR, LT, LV, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TT, UA, UG, US, VN				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2200579	AA	19960404	CA 1995-2200579	19950919
AU 9536080	A1	19960419	AU 1995-36080	19950919
AU 702846	B2	19990304		
EP 784619	A1	19970723	EP 1995-933399	19950919
EP 784619	B1	19990324		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
CN 1160401	A	19970924	CN 1995-195301	19950919
CN 1068881	B	20010725		
BR 9509035	A	19971014	BR 1995-9035	19950919
HU 77311	A2	19980330	HU 1997-1818	19950919
JP 10506117	T2	19980616	JP 1995-511337	19950919
AT 178064	E	19990415	AT 1995-933399	19950919
ES 2133805	T3	19990916	ES 1995-933399	19950919
RU 2154634	C2	20000820	RU 1997-106794	19950919
CZ 288942	B6	20011017	CZ 1997-919	19950919
PL 182174	B1	20011130	PL 1995-319998	19950919
IL 115412	A1	20000217	IL 1995-115412	19950922
ZA 9508086	A	19970326	ZA 1995-8086	19950926
NO 9701375	A	19970505	NO 1997-1375	19970324
NO 311673	B1	20020102		
US 5872131	A	19990216	US 1997-809502	19970324
FI 9701273	A	19970326	FI 1997-1273	19970326

PRIORITY APPLN. INFO.:
EP 1994-202791 A 19940927
US 1995-454776 A1 19950531
WO 1995-EP3690 W 19950919

OTHER SOURCE(S): MARPAT 125:86511
GI



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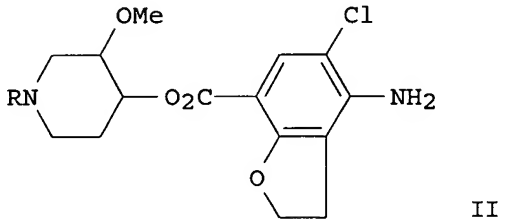
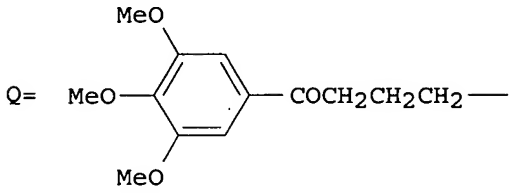


II



AB Novel benzoate derivs. having formula [I; R1 = halo or C1-6 alkylsulfonylamino; either R2 = hydrogen and R3 = C1-6alkyl, C2-6alkenyl, or C2-6 alkynyl; or R2 and R3 taken together form a bivalent radical of formula CH:CH (a), (CH2)2 (b), or (CH2)3 (c); in the bivalent radicals of formula (a), (b) or (c) one or two hydrogen atoms may be replaced by C1-6 alkyl; Alk = C1-6 alkanediyl; R4 = hydrogen or C1-6 alkyloxy; R5, R6, R7 = hydrogen, halo, C1-6 alkyl, C1-6 alkyloxy; or R5 and R6 taken together may also form a bivalent radical of formula: NR8C(O)NR9, NHC(NHR10):N, O(CH2)mO; R8, R9 = hydrogen or C1-6 alkyl; R10 = hydrogen, C1-6 alkylcarbonyl, C1-6 alkyloxycarbonyl; m = 1 or 2], the N-oxide forms, the pharmaceutically acceptable acid addition salts, and the stereochem. isomeric forms thereof, are prepared Thus, a solution of (RS)-tert-Bu cis-4-hydroxy-3-methoxy-1-piperidinecarboxylate (preparation given) in THF was stirred with NaH under reflux for 3 h, treated with a reaction solution prepared by stirring 1,1'-carbonyl bis 1H-imidazole and 4-amino-5-chloro-2,3-dihydro-1H-imidazole in MeCN at room temperature for 2 h, and stirred at room temperature for 2 h to give 87% (RS)-cis-1-tert-butoxycarbonyl-3-methoxy-4-piperidinyl 4-amino-5-chloro-2,3-dihydro-7-benzofurancarboxylate. The latter compound was refluxed with a mixture of THF and concentrated HCl, cooled, and neutralized to give 26% an intermediate (II; R = H), which was refluxed with 4-chloro-1-(3,4,5-trimethoxyphenyl)-1-butanone, NaHCO3, and KI in 4-methyl-2-pentanone overnight to give the title 1-benzoylpropyl-4-piperidinyl 7-benzofurancarboxylate II (R = Q). In a guinea pig ileum coaxial stimulation assay, the latter compound showed an increase of the amplitude of the twitch response of ≥5% at a concentration of 3 + 10-9 M. It in vivo also induced defecation in at least 50% of dogs at doses of 0.31 mg/kg during those first 3 h.

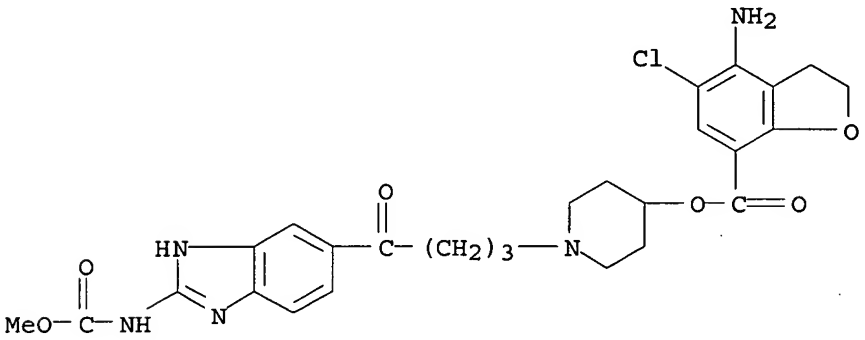
IT **178759-84-7P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-benzoylalkylpiperidinyl benzoate derivs. for treatment of intestinal disorders involving a decreased colon motility)

RN 178759-84-7 HCAPLUS

CN 7-Benzofurancarboxylic acid, 4-amino-5-chloro-2,3-dihydro-, 1-[4-[2-[(methoxycarbonyl)amino]-1H-benzimidazol-5-yl]-4-oxobutyl]-4-piperidinyl ester (9CI) (CA INDEX NAME)



L19 ANSWER 12 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:124172 HCAPLUS

DOCUMENT NUMBER: 120:124172

TITLE: Segregation of activity profile in benzimidazoles: effect of spacers at 5(6)-position of methyl benzimidazole-2-carbamates

AUTHOR(S): Agarwal, Shiv K.; Sharma, Satyavan; Bhaduri, A. P.

CORPORATE SOURCE: Med. Chem. Div., Cent. Drug Res. Inst., Lucknow, 226001, India

SOURCE: Zeitschrift fuer Naturforschung, C: Journal of Biosciences (1993), 48(11-12), 829-38
CODEN: ZNCBDA; ISSN: 0341-0382

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The design and synthesis of a series of Me 5(6)-substituted benzimidazole-2-carbamates as potential anthelmintics are described. A rational anal. of the structural parameters which segregate the activity of resulting benzimidazole-2-carbamates against enteric and tissue dwelling helminths is presented. The influence of single and multiple spacers, which link the pharmacophores at 5(6)-position of benzimidazole-2-carbamate, on the activity against Ancylostoma ceylanicum (hookworm), Syphacia obvelata (pinworm), Hymenolepis nana (tapeworm) Litomosoides carinii and Acanthocheilonema viteae (filarial worm) has been presented. This anal. indicates that for activity against intestinal helminth the presence of one spacer holding the pharmacophore approx. 3 Å apart from the parent nucleus is usually preferred. While for activity against tissue dwelling parasite, the repetition of the benzimidazole-2-carbamate nucleus joined together through the 5,5'-position with one spacer kept apart by distance of 3 Å unit is usually desired.

IT **89791-36-6 89791-39-9 153213-47-9**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

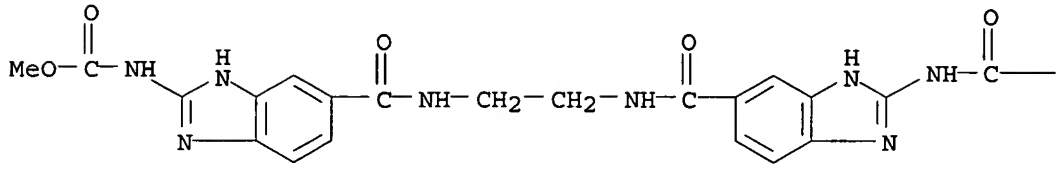
(anthelmintic activity of, structure-activity relations in)

RN 89791-36-6 HCAPLUS

CN Carbamic acid, [1,2-ethanediylbis(iminocarbonyl-1H-benzimidazole-5,2-

diyl)]bis-, dimethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

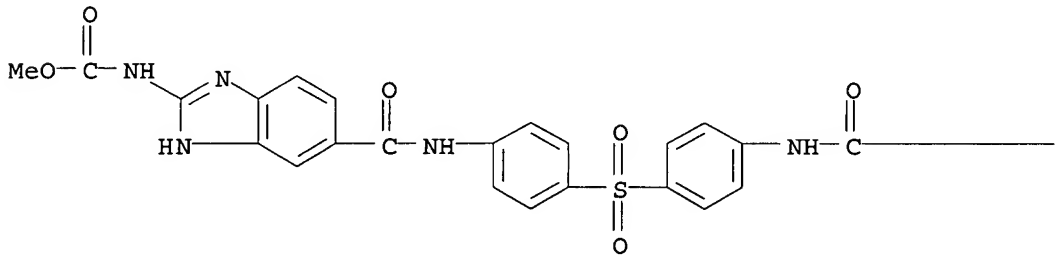


PAGE 1-B

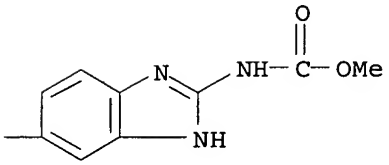
—OMe

RN 89791-39-9 HCAPLUS
CN Carbamic acid, [sulfonylbis(4,1-phenyleneiminocarbonyl-1H-benzimidazole-5,2-diyl)]bis-, dimethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

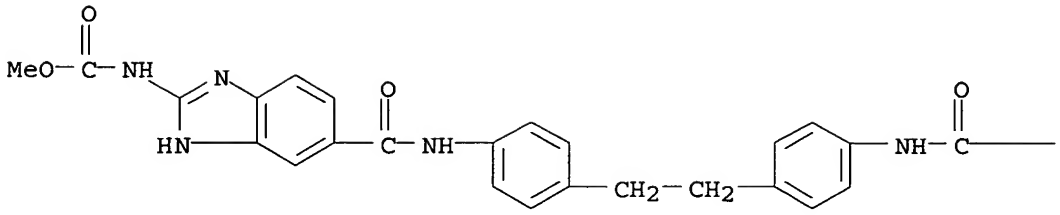


PAGE 1-B

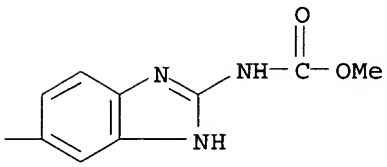


RN 153213-47-9 HCAPLUS
CN Carbamic acid, [1,2-ethanediylbis(4,1-phenyleneiminocarbonyl-1H-benzimidazole-5,2-diyl)]bis-, dimethyl ester (9CI) (CA INDEX NAME)

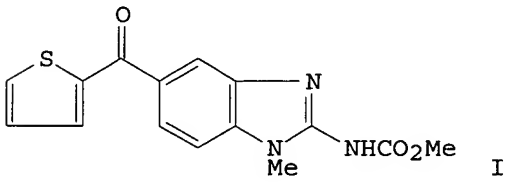
PAGE 1-A



PAGE 1-B



L19 ANSWER 13 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1989:95099 HCAPLUS
DOCUMENT NUMBER: 110:95099
TITLE: Synthesis, tubulin binding, antineoplastic evaluation, and structure-activity relationship of oncodazole analogs
AUTHOR(S): Kruse, Lawrence I.; Ladd, David L.; Harrsch, Peter B.; McCabe, Francis L.; Mong, Shau Ming; Faucette, Leo; Johnson, Randall
CORPORATE SOURCE: Res. Dev. Div., Smith Kline and French Lab., Swedeland, PA, 19406, USA
SOURCE: Journal of Medicinal Chemistry (1989), 32(2), 409-17
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 110:95099
GI



I

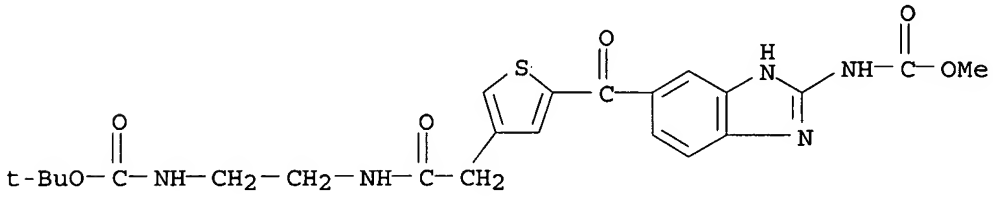
AB In an attempt to identify a soluble oncodazole analog that could be easily formulated, a series of 28 substituted oncodazoles, e.g., I, was prepared and evaluated for tubulin binding affinity, in vitro cytotoxicity against cultured mouse B-16 cells, and ability to prolong life span at the maximally tolerated dose in the P388 mouse leukemia model. Biol. evaluation of all the isomeric methyloncodazoles showed the thiophene 4'-position to be the only site of significant bulk tolerance, although

substitution at this position with polar or charged functional groups abolished biol. activity. Simple esters of the 4'-(carboxymethyl)oncodazole had enhanced antitumor activity and tubulin binding affinity relative to oncodazole. Despite a failure of this study to identify a water-soluble oncodazole with antitumor activity, the structure-activity relationship developed led to a derivative with enhanced activity in the P388 leukemia model and facilitated the preparation of a biol. active photolabile analog.

IT **117498-97-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deprotection of)

RN 117498-97-2 HCAPLUS

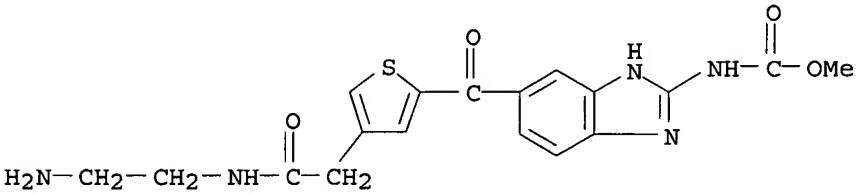
CN Carbamic acid, [5-[[4-[2-[[2-[[(1,1-dimethylethoxy)carbonyl]amino]ethyl]amino]-2-oxoethyl]-2-thienyl]carbonyl]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



IT **117498-30-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, cytotoxicity, and antineoplastic activity of)

RN 117498-30-3 HCAPLUS

CN Carbamic acid, [5-[[4-[2-[(2-aminoethyl)amino]-2-oxoethyl]-2-thienyl]carbonyl]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



L19 ANSWER 14 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1987:477694 HCAPLUS

DOCUMENT NUMBER: 107:77694

TITLE: Syntheses and anthelmintic activity of 5(6)-substituted benzimidazole-2-carbamates and N1,N2-dimethoxycarbonyl-N3-(p-substituted phenyl)guanidines

AUTHOR(S): Niwas, Shri; Kumar, Shiv; Bhaduri, A. P.

CORPORATE SOURCE: Med. Chem. Div., Cent. Drug Res. Inst., Lucknow, 226 001, India

SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1985), 24B(7), 747-53
CODEN: IJSBDB; ISSN: 0376-4699

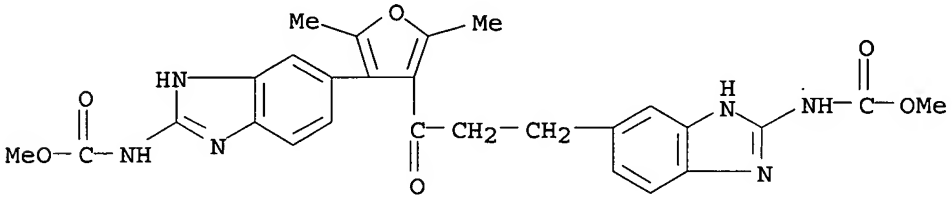
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 107:77694

AB A number of benzimidazole-2-carbamates with acylfuranyl, dihydroxycyclohexanyl, oxocyclohexenyl, and hydrogenated benzopyrazolyl substituents were synthesized and evaluated for their antiparasitic activity against L. carinii in cotton rats, H. nana in mice, and A. ceylanicum in hamsters. All the compds. exhibites activity against hookworm infection and were ineffective against filarial and cestode infections.

IT **104406-40-8P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and anthelmintic activity of)

RN 104406-40-8 HCAPLUS

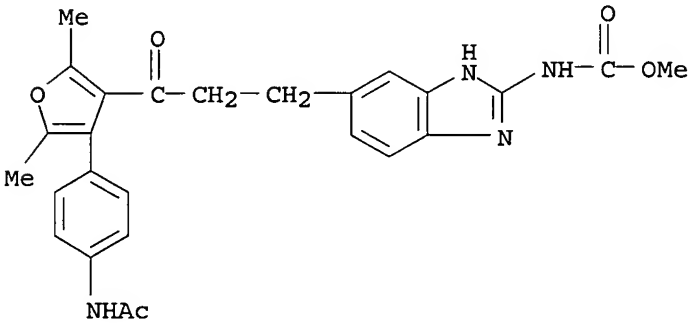
CN Carbamic acid, [5-[3-[4-[2-[(methoxycarbonyl)amino]-1H-benzimidazol-5-yl]-2,5-dimethyl-3-furanyl]-3-oxopropyl]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



IT **104406-15-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 104406-15-7 HCAPLUS

CN Carbamic acid, [5-[3-[4-[4-(acetylamino)phenyl]-2,5-dimethyl-3-furanyl]-3-oxopropyl]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



L19 ANSWER 15 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1987:84274 HCAPLUS
DOCUMENT NUMBER: 106:84274
TITLE: β-Lactam antibiotics
INVENTOR(S): Schmidt, Gunter; Zeiler, Hans Joachim; Metzger, Karl Georg
PATENT ASSIGNEE(S): Bayer A.-G., Fed. Rep. Ger.

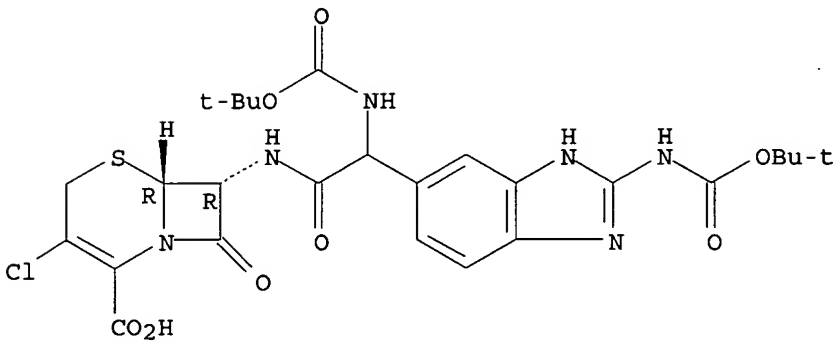
SOURCE: Ger. Offen., 146 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3508258	A1	19860918	DE 1985-3508258	19850308
US 4748163	A	19880531	US 1986-832483	19860221
NO 8600679	A	19860909	NO 1986-679	19860224
NO 165108	B	19900917		
NO 165108	C	19901227		
EP 195947	A2	19861001	EP 1986-102491	19860226
EP 195947	A3	19880504		
EP 195947	B1	19960424		
R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
AT 137238	E	19960515	AT 1986-102491	19860226
ES 552683	A1	19871101	ES 1986-552683	19860305
IL 78042	A1	19901105	IL 1986-78042	19860305
FI 8600945	A	19860909	FI 1986-945	19860306
FI 85708	B	19920214		
FI 85708	C	19920525		
DD 251751	A5	19871125	DD 1986-287635	19860306
DD 266502	A5	19890405	DD 1986-311493	19860306
CA 1281315	A1	19910312	CA 1986-503441	19860306
DK 8601052	A	19860909	DK 1986-1052	19860307
AU 8654430	A1	19860911	AU 1986-54430	19860307
AU 594941	B2	19900322		
JP 61207388	A2	19860913	JP 1986-48721	19860307
JP 06049708	B4	19940629		
ZA 8601713	A	19861126	ZA 1986-1713	19860307
HU 41031	A2	19870330	HU 1986-986	19860307
HU 200183	B	19900428		
CN 86101382	A	19860903	CN 1986-101382	19860308
CN 1017335	B	19920708		
US 33948	E	19920602	US 1989-400200	19890829
PRIORITY APPLN. INFO.:			DE 1985-3508258 A	19850308
			US 1986-832483 A5	19860221

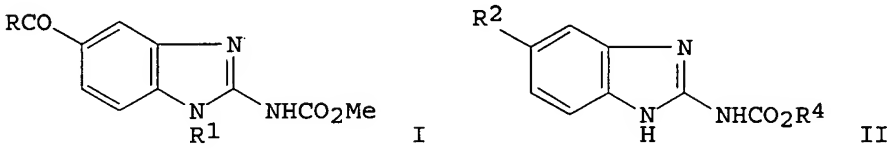
OTHER SOURCE(S): CASREACT 106:84274
GI For diagram(s), see printed CA Issue.
AB The title compds. [I; X = CMe2, CH2, CH2CR5: ; R1 = Q; R2 = H, protecting group; R3 = H, alkoxy, alkylthio, (un)substituted amino; R4 = H, protecting group; esterified hydroxyalkyl, heterocyclyl, heterocyclylmethyl; alkali anion, ammonium anion; R5 = H, halo, (un)substituted alkyl, alkoxy, alkylthio; Y = N, substituted CH; YR7 = CO, C:NR7; Z = O, S, (un)substituted NH; R6 = H, OH, NH2, (un)substituted C1-10 alkyl or aryl; R7 = H, (un)substituted C1-10 alkyl or aryl; R8 = H, C1-8 alkoxy, alkylthio, CF3, OH, SH, halo, (un)substituted amino] were prepared as antibiotics. Thus, Et 2-aminobenzothiazole-6-carboxylate was converted in 4 steps to DL-α-amino-α-(2-aminobenzothiazol-6-yl)acetic acid. This was protected and coupled with 7-amino-3-chloro-3-cephem-4-carboxylic acid to give DL-7-(2-aminobenzothiazol-6-ylglycinamido)-3-chloro-3-cephem-4-carboxylic acid. This was converted to the trifluoroacetate and chromatog. separated into the D (II) and L (III) forms. II was active against Staphylococcus 133 with min. inhibitory concentration = 0.5 μg/mL.
IT **106429-72-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as antibiotic and deprotection of)
RN 106429-72-5 HCAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-chloro-7-[[[[(1,1-dimethylethoxy)carbonyl]amino][2-[[(1,1-dimethylethoxy)carbonyl]amino]-1H-benzimidazol-5-yl]acetyl]amino]-8-oxo-, [6R-(6α,7β)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

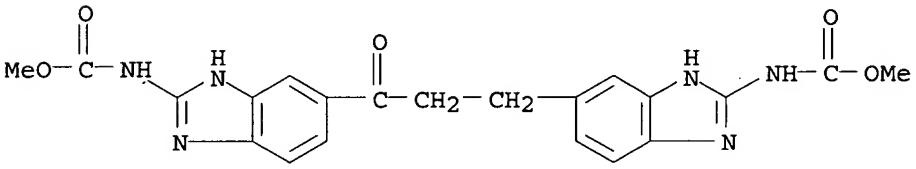


L19 ANSWER 16 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1986:109536 HCAPLUS
DOCUMENT NUMBER: 104:109536
TITLE: Syntheses of methyl 5(6)-acyl-, aroyl- and β-aroylethylbenzimidazole-2-carbamates and related compounds as possible anthelmintics
AUTHOR(S): Niwas, Shri; Kumar, Shiv; Bhaduri, A. P.
CORPORATE SOURCE: Div. Med. Chem., Cent. Drug Res. Inst., Lucknow, 226 001, India
SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1985), 24B(5), 574-7
CODEN: IJSBDB; ISSN: 0376-4699
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 104:109536
GI

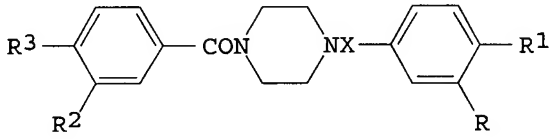


AB Benzimidazolecarbamates I (R = naphthyl, biphenylyl, Me; R1 = H, Bu, furfuryl, PhCH2) and II [R2 = R3CH2CH2CO, R3COCH2CH2 (R3 = Ph, 2-furyl, Me, Et), R4 = Me, Et] were prepared and evaluated for anthelmintic activity against Ancyclostoma ceylanicum in hamsters, Nippostrengylus brasiliensis in rats, Hymenolepis nana in mice and Litomosoides carinii in cotton rats. I (R = naphthyl, biphenylyl) were prepared from 4,3-Cl(O2N)C6H3CO2H by successive acyl chlorination, Friedel-Crafts acylation with naphthalene or biphenyl, amination with R1NH2, diimide reduction, and cyclization with ClCO2Me-HN:C(SMe)NH2.

IT **100806-14-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and anthelmintic activity of)
RN 100806-14-2 HCAPLUS
CN Carbamic acid, [(1-oxo-1,3-propanediyl)bis(1H-benzimidazole-5,2-diyl)]bis-, dimethyl ester (9CI) (CA INDEX NAME)



L19 ANSWER 17 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1985:185052 HCAPLUS
DOCUMENT NUMBER: 102:185052
TITLE: Synthesis of 2-carbalkoxyamino-5(6)-(1-substituted piperazin-4-yl/piperazin-4-ylcarbonyl)benzimidazoles and related compounds as potential anthelmintics
AUTHOR(S): Abuzar, S.; Sharma, S.
CORPORATE SOURCE: Div. Med. Chem., Cent. Drug Res. Inst., Lucknow, 226001, India
SOURCE: Pharmazie (1984), 39(11), 747-9
CODEN: PHARAT; ISSN: 0031-7144
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 102:185052
GI



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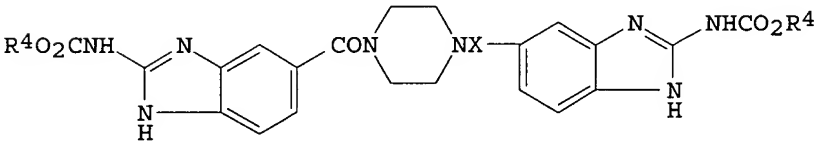

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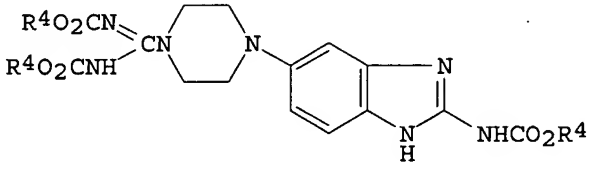


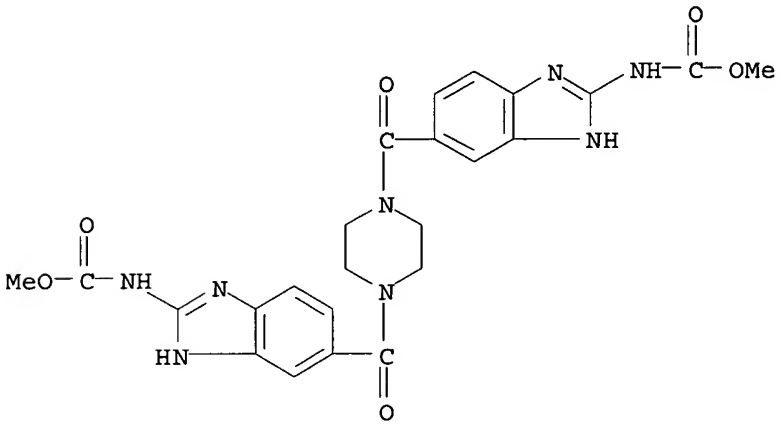
III

AB Benzoylpiperazines I (R-R3 = NH2, X = CO, bond; R = R2 = NO2, R1 = R3 =

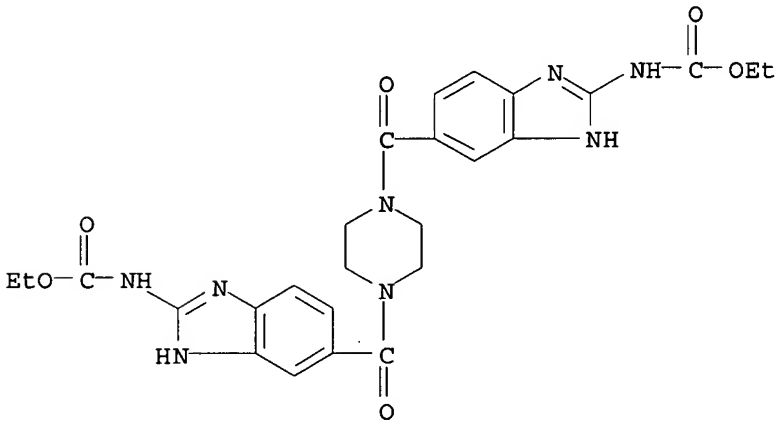
Cl, NHAc, NH2, X = CO; R = R3 = NH2, R1 = R2 = NO2, X = bond), piperazinylcarbonylbenzimidazoles II (R4 = Me, Et; X = CO, bond), and piperazinylbenzimidazoles III (R4 = Me, Et) were prepared None of the compds. showed anthelmintic activity against Ancylostoma ceylanicum infection in hamsters at ≤250 mg/kg/day orally for 3 days or filaricidal activity against Limotosoides carinii in rats at 30 mg/kg/day i.p. for 5 days.

IT **96103-56-9P 96103-57-0P 96103-58-1P**
96103-59-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and anthelmintic activity of)

RN 96103-56-9 HCAPLUS
CN Carbamic acid, [1,4-piperazinediylbis(carbonyl-1H-benzimidazole-5,2-diyl)]bis-, dimethyl ester (9CI) (CA INDEX NAME)

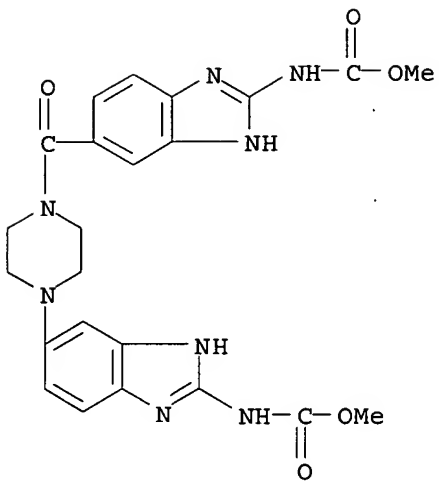


RN 96103-57-0 HCAPLUS
CN Carbamic acid, [1,4-piperazinediylbis(carbonyl-1H-benzimidazole-5,2-diyl)]bis-, diethyl ester (9CI) (CA INDEX NAME)

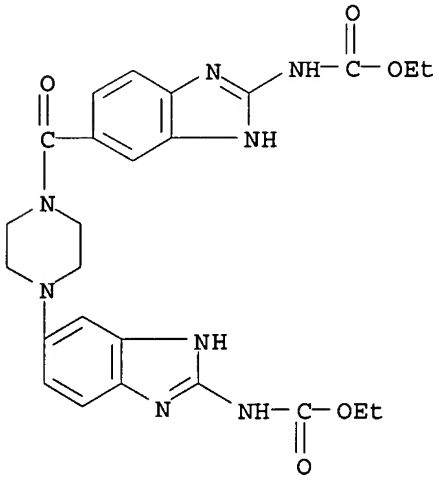


RN 96103-58-1 HCAPLUS
CN Carbamic acid, [5-[4-[[2-[(methoxycarbonyl)amino]-1H-benzimidazol-5-yl]carbonyl]-1-piperazinyl]-1H-benzimidazol-2-yl]-, methyl ester (9CI)

(CA INDEX NAME)

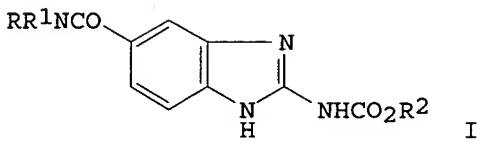


RN 96103-59-2 HCAPLUS
CN Carbamic acid, [5-[4-[[2-[(ethoxycarbonyl)amino]-1H-benzimidazol-5-yl]carbonyl]-1-piperazinyl]-1H-benzimidazol-2-yl]-, ethyl ester (9CI) (CA INDEX NAME)



L19 ANSWER 18 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1984:454990 HCAPLUS
DOCUMENT NUMBER: 101:54990
TITLE: Syntheses and anthelmintic activity of alkyl 5(6)-(substituted carbamoyl)- and 5(6)-(disubstituted carbamoyl)benzimidazole-2-carbamates and related compounds
AUTHOR(S): Kumar, Shiv; Seth, Manju; Bhaduri, Amiya P.; Visen, Pradeep K. S.; Misra, Anuradha; Gupta, Suman; Fatima, Nigar; Katiyar, Jagdish C.; Chatterjee, Ranjeet K.; Sen, Amiya B.
CORPORATE SOURCE: Div. Med. Chem., Cent. Drug Res. Inst., Lucknow,

226001, India
SOURCE: Journal of Medicinal Chemistry (1984), 27(8), 1083-9
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



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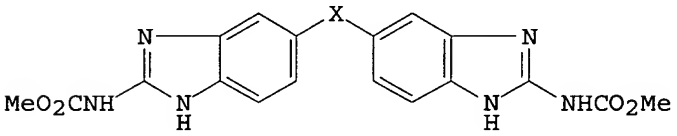


II

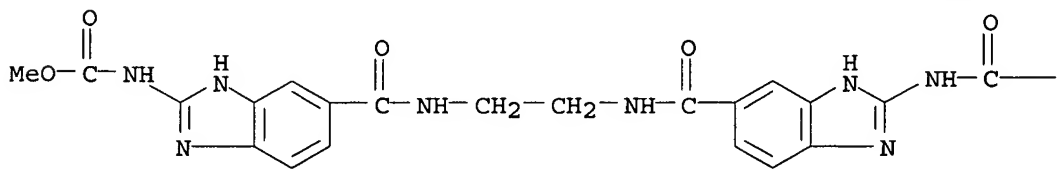
AB The title compds. I (R = H, alkyl; R1 = alkyl, cycloalkyl, heterocyclyl; RR1N = heterocycle; R2 = Me, Et) and II (X = CONHZNHCO; Z = CH2CH2, PhCHCH2, p-C6H4SC6H4-p, p-C6H4SO2C6H4-p) were prepared from 2,4-O2N(HO2C)C6H3NHCOMe via cyclization of RNR1 COC6H3(NH2)2-3,4 or 3,4-(H2N)2C6H3XC6H3(NH2)2-3,4 with H2NC(SMe):NH and ClCO2R2. II (X = p-NHCOC6H4CONH) was prepared from 2,5-(H2N)2C6H3NO2 and p-ClCOC6H4COCl. A large percentage of I and II were active against Ancylostoma ceylanicum and at higher doses against Hymemolepsis nana infections. Compared to the alkyl 5(6)-N-substituted carbamoylbenzimidazole-2-carbamates, the N,N-disubstituted carbamoyl analogs have better anthelmintic activity. The most active compound of the series I [RR1N = 4-(2-pyridyl)piperazino, R2 = Me](III) was screened against intestinal helminths in higher animals and as a micro- and macrofilaricidal agent. III was a broad-spectrum anthelmintic, as shown by its activity against A. ceylanicum (hamsters and dogs), H. nana (rats), Nippostrogylus brasiliensis (rats), Syphacia obvelata (mice), A. tubaeformis (cat), Toxocara spp. (cat), and Litomosoides carinii (cotton rat).

IT **89791-36-6P 89791-37-7P 89791-38-8P**
89791-39-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and anthelmintic activity of)

RN 89791-36-6 HCAPLUS

CN Carbamic acid, [1,2-ethanediylbis(iminocarbonyl-1H-benzimidazole-5,2-diyl)]bis-, dimethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

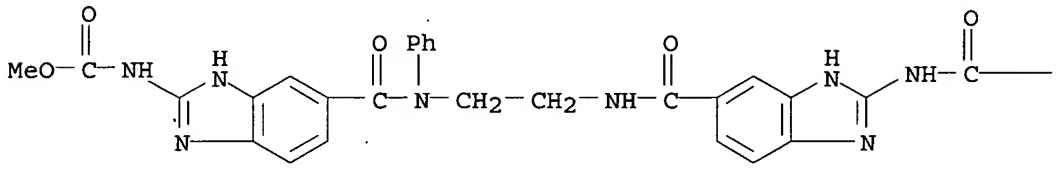


PAGE 1-B

— OMe

RN 89791-37-7 HCAPLUS
CN Carbamic acid, [5-[[[2-[[[2-[(methoxycarbonyl)amino]-1H-benzimidazol-5-yl]carbonyl]amino]ethyl]phenylamino]carbonyl]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

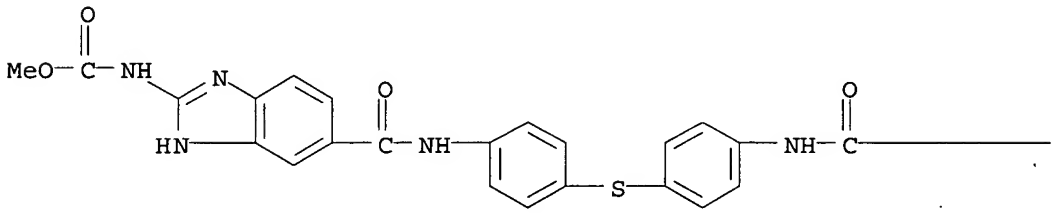


PAGE 1-B

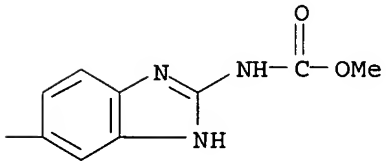
— OMe

RN 89791-38-8 HCAPLUS
CN Carbamic acid, [thiobis(4,1-phenyleneiminocarbonyl-1H-benzimidazole-5,2-diyl)]bis-, dimethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



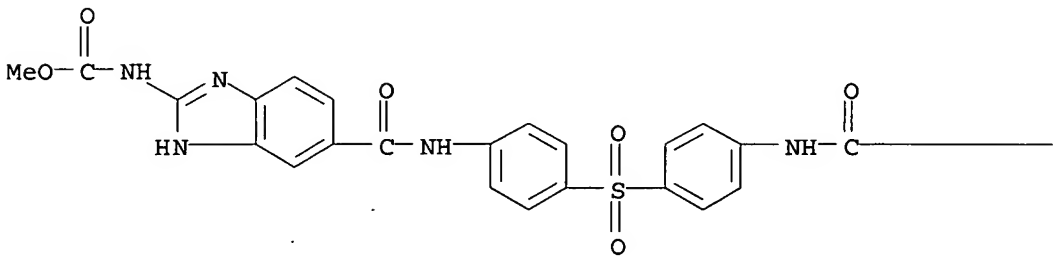
PAGE 1-B



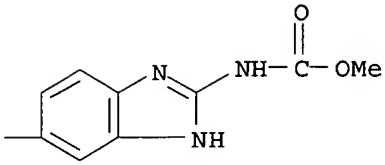
RN 89791-39-9 HCAPLUS

CN Carbamic acid, [sulfonylbis(4,1-phenyleneiminocarbonyl-1H-benzimidazole-5,2-diyl)]bis-, dimethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



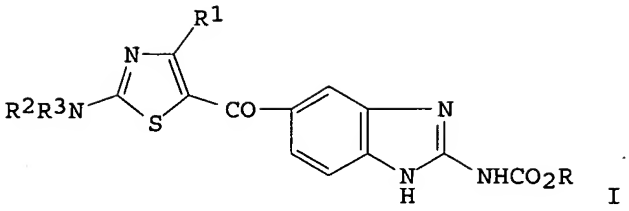
PAGE 1-B



L19 ANSWER 19 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1983:405628 HCAPLUS
DOCUMENT NUMBER: 99:5628
TITLE: Benzimidazolecarbamates
PATENT ASSIGNEE(S): Ciba-Geigy Ltd., India
SOURCE: Indian, 66 pp.
CODEN: INXXAP
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
IN 149762	A	19820410	IN 1978-BO180		19780616
AU 7948100	A1	19791220	AU 1979-48100		19790615
AU 534840	B2	19840216			
ZA 7902975	A	19800625	ZA 1979-2975		19790615
PRIORITY APPLN. INFO.:			IN 1978-180	A	19780616
			IN 1978-BO180	A	19780616

GI



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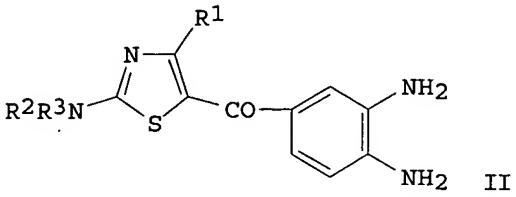


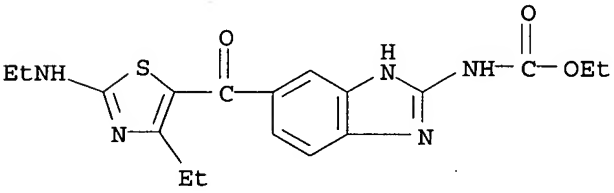
II

AB The anthelmintic (no data) benzimidazolecarbamates I (R = (un)substituted aliphatic, cycloaliph., cycloaliphaticaliph. or aryl group; R1 = H, (un)substituted aliphatic group; R2, R3 = H, (un)substituted aliphatic, cycloaliph., or aromatic group, R2R3 = bivalent or hetero substituted bivalent hydrocarbon) were prepared by a process in which the phenylenediamine derivs. II were cyclized with carbamate derivs. Thus, 5-methylpseudothiourea sulfate was treated with ClCO2Et and the product cyclized with II (R1 = R2 = Me, R3 = H) to give I (R = Et, R1 = R2 = Me, R3 = H). II (R1 = R2 = Me, R3 = H) was prepared in 4 steps from MeC(:NH)OEt, MeNCS and 4-chloro-3-nitrophenacyl bromide.

IT **74319-50-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 74319-50-9 HCAPLUS

CN Carbamic acid, [5-[[4-ethyl-2-(ethylamino)-5-thiazolyl]carbonyl]-1H-benzimidazol-2-yl]-, ethyl ester (9CI) (CA INDEX NAME)



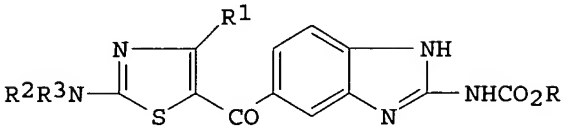
L19 ANSWER 20 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1981:103370 HCAPLUS
DOCUMENT NUMBER: 94:103370
TITLE: Benzimidazoles for pharmaceutical preparations containing such compounds
INVENTOR(S): Rajappa, Srinivasachari; Sudarsanam, Vasudevan
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
SOURCE: S. African, 43 pp.
CODEN: SFXXAB
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
ZA 7902975	A	19800625	ZA 1979-2975		19790615
IN 149762	A	19820410	IN 1978-BO180		19780616
PRIORITY APPLN. INFO.:			IN 1978-180	A	19780616
			IN 1978-BO180		19780616

GI



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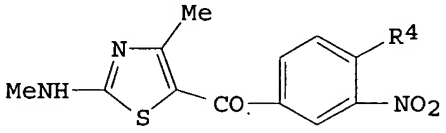


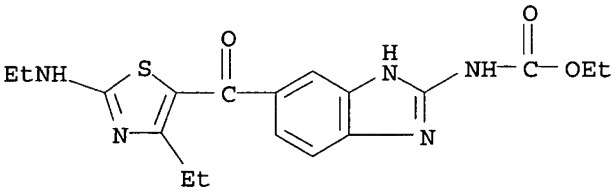
II

AB Anthelmintic (no data) benzimidazoles I (R = optionally substituted hydrocarbon; R1 = H, aliphatic; R2,R3 = optionally substituted hydrocarbon or NR2R3 = heterocyclic ring) were prepared Thus, 3,4-O2N(Cl)C6H3COCH2Br was treated with MeNHCSN:CMeOEt, prepared by treating HN:CMeOEt with MeNCS, to give II (R4 = Cl), which was aminated to give II (R4 = NH2). Reduction of the nitro group in II (R4 = NH2) gave the diamine, which was condensed with HNC(:NH)SMe.H2SO4 and ClCO2Et to give I (R = Et, R1 = R2 = Me, R3 = H).

IT **74319-50-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 74319-50-9 HCAPLUS

CN Carbamic acid, [5-[[4-ethyl-2-(ethylamino)-5-thiazolyl]carbonyl]-1H-benzimidazol-2-yl]-, ethyl ester (9CI) (CA INDEX NAME)



L19 ANSWER 21 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:	1980:471779 HCAPLUS
DOCUMENT NUMBER:	93:71779
TITLE:	Benzimidazole derivatives as anthelmintics
PATENT ASSIGNEE(S):	Ciba-Geigy A.-G., Switz.
SOURCE:	Jpn. Kokai Tokkyo Koho, 20 pp. CODEN: JKXXAF
DOCUMENT TYPE:	Patent
LANGUAGE:	Japanese
FAMILY ACC. NUM. COUNT:	1

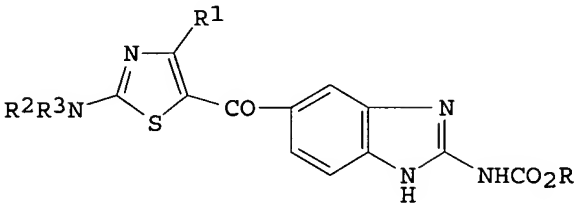
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 55024172	A2	19800221	JP 1979-99143	19790804
JP 01014235	B4	19890310		
US 4297365	A	19811027	US 1979-61097	19790726
EP 8047	A1	19800220	EP 1979-102680	19790727
EP 8047	B1	19851204		
R: CH, DE, FR, GB, IT, NL, SE				
ES 483087	A1	19800416	ES 1979-483087	19790802
US 4386097	A	19830531	US 1981-288078	19810729

PRIORITY APPLN. INFO.: CH 1978-8359 A 19780804
US 1979-61097 A1 19790726

OTHER SOURCE(S): CASREACT 93:71779

GI



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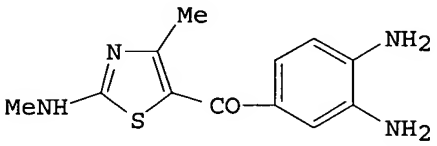


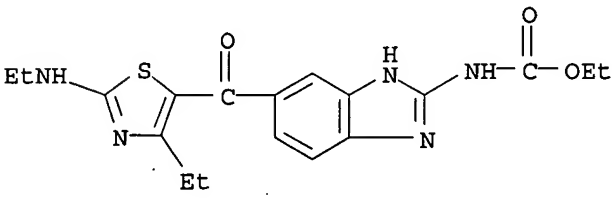
II

AB Benzimidazole derivs. (I; R = organic radical; R1 = H, aliphatic radical; R2, R3 = H, organic radical, R2R3 = alkylene containing optional hetero atom), effective anthelmintics at 10-100 mg/kg, were prepared Thus, 3.2 g ClCO2Et was added to 4.2 g H2NC(:NH)SMe.H2SO4 in H2O at 0-2°, the mixture stirred, treated with aqueous NaOH to pH 7.5-8 followed by HOAc to pH 5-5.5 to give MeSC(NH2):NCO2Et, which in situ was refluxed with 4 g II in MeOH to give I (R = Et, R1 = R2 = Me, R3 = H). I were prepared by alternative routes.

IT **74319-50-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 74319-50-9 HCAPLUS

CN Carbamic acid, [5-[[4-ethyl-2-(ethylamino)-5-thiazolyl]carbonyl]-1H-benzimidazol-2-yl]-, ethyl ester (9CI) (CA INDEX NAME)



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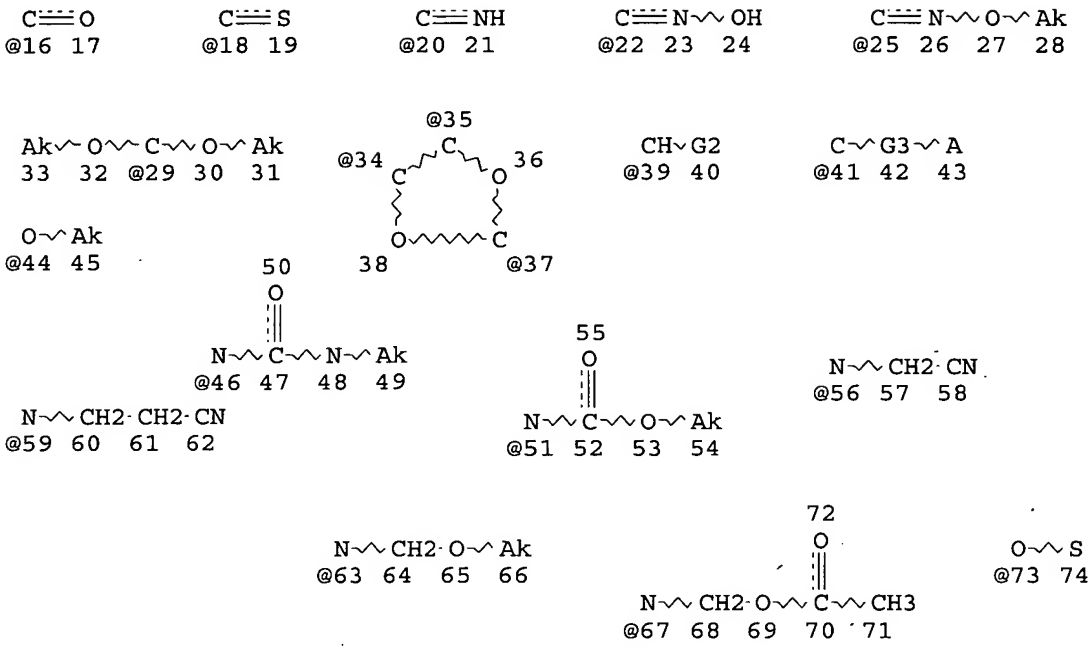
L12 STR



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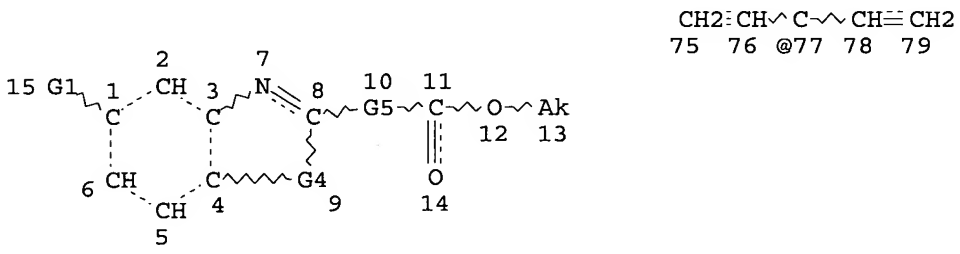

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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS 79

STEREO ATTRIBUTES: NONE
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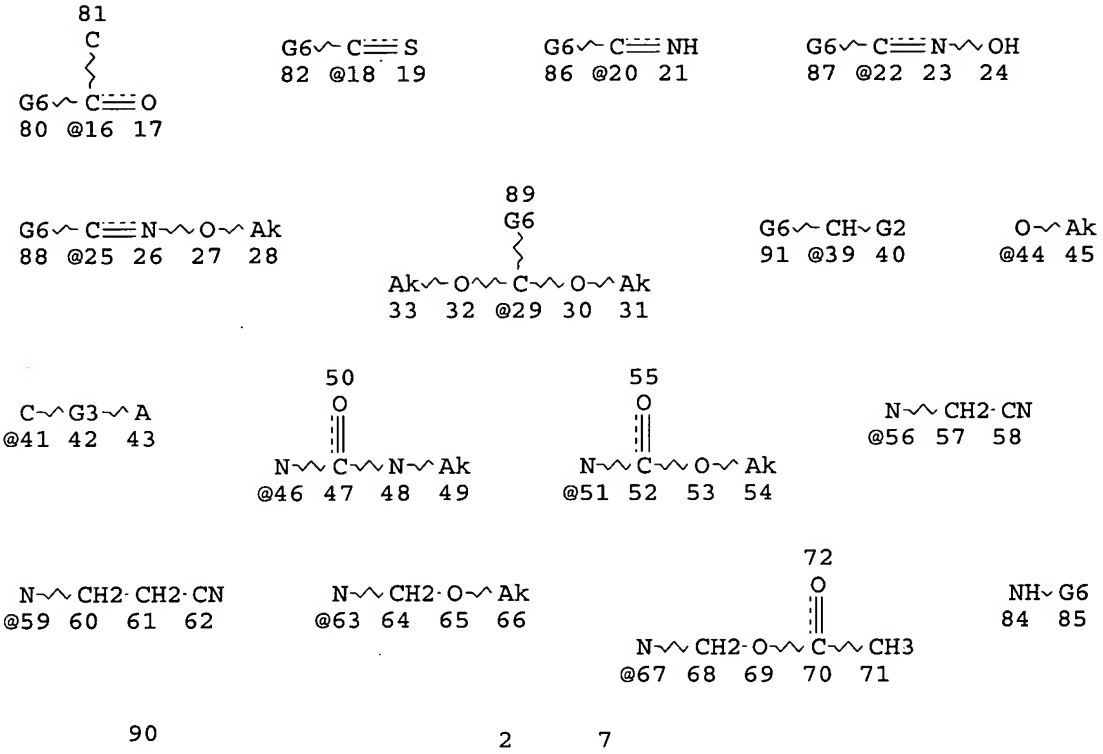
L17 STR



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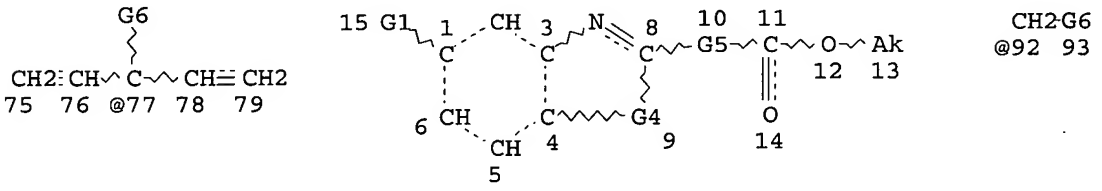

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NUMBER OF NODES IS 94

STEREO ATTRIBUTES: NONE

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L20        1776 SEA FILE=REGISTRY ABB=ON  PLU=ON  L16 NOT L18
L21        3282 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L20
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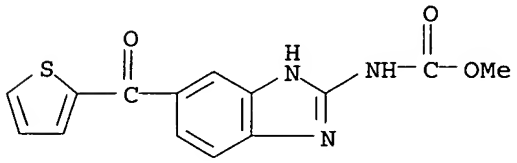
L26  ANSWER 1 OF 1  HCAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:        1990:171947  HCAPLUS
DOCUMENT NUMBER:         112:171947
TITLE:                   Downregulation of tumor necrosis factor receptors on
                         macrophages and endothelial cells by microtubule
                         depolymerizing agents
AUTHOR(S):               Ding, Aihao H.; Porteu, Francoise; Sanchez, Elizabeth;
                         Nathan, Carl F.
CORPORATE SOURCE:        Med. Coll., Cornell Univ., New York, NY, 10021, USA
SOURCE:                  Journal of Experimental Medicine (1990),
                         171(3), 715-27
                         CODEN: JEMEAV; ISSN: 0022-1007
DOCUMENT TYPE:           Journal
LANGUAGE:                English
AB   Exposure of murine and human macrophages and human umbilical vein
     endothelial cells to micromolar concns. of five microtubule (MT)-depolymg.
     agents (colchicine, nocodazole, podophyllotoxin, vincristine, and
     vinblastine) resulted in a loss of binding sites of iodinated TNF-α.
     The reduction amounted to 40-60% by 1 h and .apprx.75% by 2-4 h.  In 1 h,
     specific binding was reduced 50% by 0.1-5 μM of these drugs at 37
     °C, but not at 4 °C.  Inactive isomers of colchicine were
     ineffective, as were microfilament-destabilizing cytochalasins.  The
     active agents did not compete with TNF-αR for binding.  Antiserum
     against TNF-α did not neutralize the effect of colchicine and
     nocodazole.  PGE1 and dibutyryl-cAMP could not mimic, and cyclooxygenase
     inhibitors could not prevent the drug effects.  All the binding sites were
     regenerated within 3 h after removal of nocodazole, which binds tubulin
     reversibly, whereas little recovery was found even 18 h after the removal
     of colchicine, which binds tubulin irreversibly.  These findings suggested
     that MT disassembly was responsible for the observed downregulation of
     TNF-αR.  The protein synthesis inhibitor cycloheximide inhibited
     binding of TNF-α to a similar extent and with a similar time course
     as colchicine in the absence of added ligand.  Neither drug affected
     binding of IFN-γ to macrophages, nor binding of TNF-α to human
     polymorphonuclear leukocytes.  Thus, an intact MT network appears to be
     important in maintenance of the steady state of TNF-αR on those
     cells in which TNF-αR turns over rapidly in the absence of ligand.
```

The antiinflammatory actions of MT-depolymg. agents may result in part from their interference with the ability of such cells to respond to TNF-α.

IT **31430-18-9**
RL: BIOL (Biological study)
(as microtubule-depolymg. agent, tumor necrosis factor α-receptor down-regulation by, in endothelium and macrophage of humans and labs. animals, anti-inflammatory activity in relation to)

RN 31430-18-9 HCAPLUS

CN Carbamic acid, [5-(2-thienylcarbonyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



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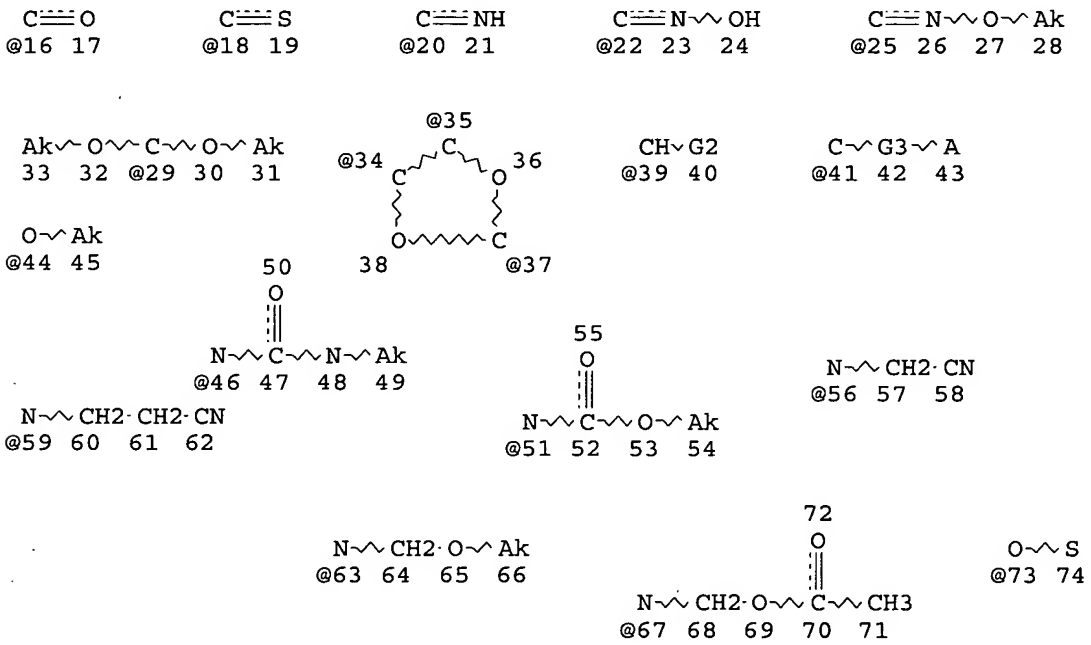

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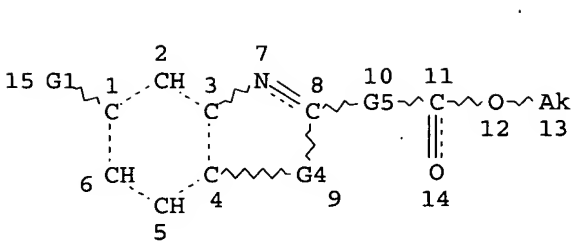

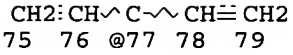

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VAR G4=NH/46/51
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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS 79

STEREO ATTRIBUTES: NONE
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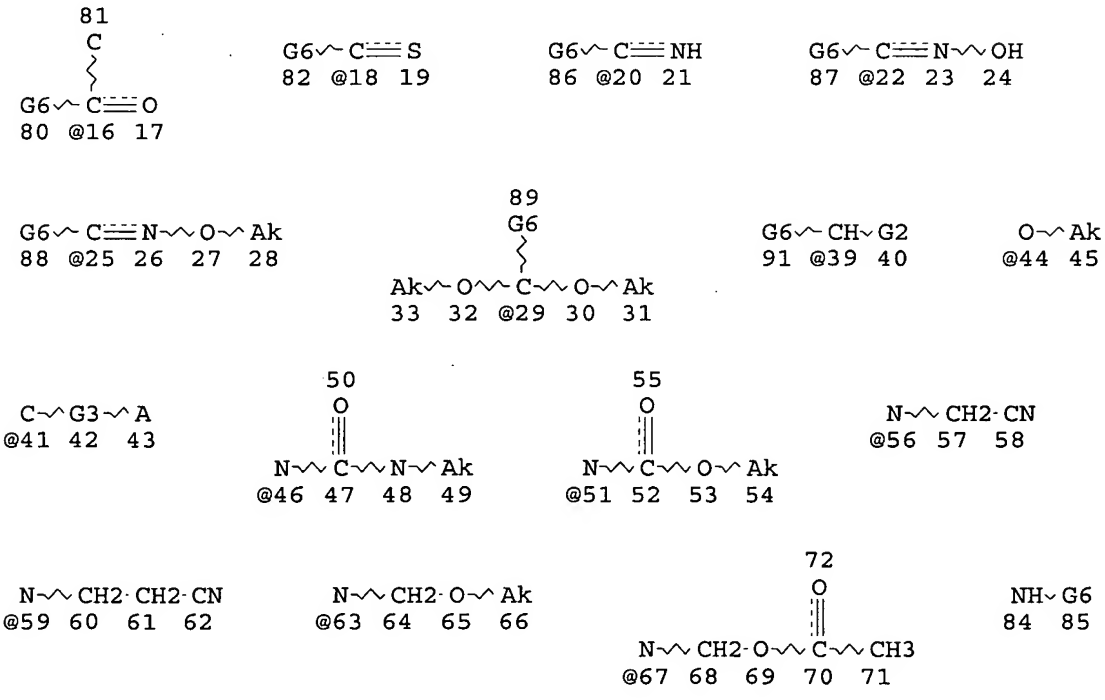
L17 STR



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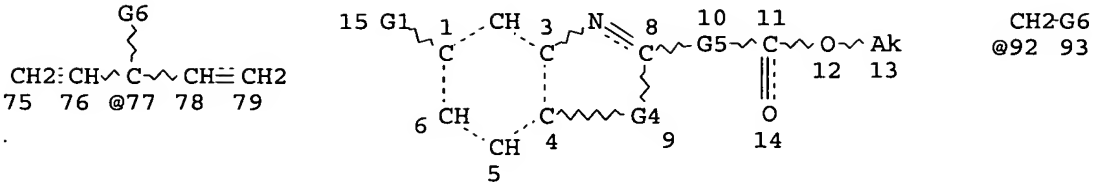

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94 95 @96 97 @98 99 @73 74 100

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VAR G6=CY/41
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DEFAULT MLEVEL IS ATOM
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RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 94

STEREO ATTRIBUTES: NONE

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L22       106361 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (ANGIOGENESIS/CV OR VASCULOGEN
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                 OR "BLOOD VESSEL"/CV OR LUTEINIZATION/CV OR "ANGIOPOIETIN
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L27  ANSWER 1 OF 23  HCAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2005:324038  HCAPLUS
DOCUMENT NUMBER:          142:397825
TITLE:                    Biocompatible, biostable coating of medical surfaces
                          composed of polysulfone and hydrophilic polymers
INVENTOR(S):              Horres, Roland; Hoffmann, Michael; Faust, Volker;
```

Hoffmann, Erika; Di Biase, Donato
PATENT ASSIGNEE(S): Hemoteq G.m.b.H., Germany
SOURCE: PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005032611	A2	20050414	WO 2004-DE2184	20040929
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DE 102004020856	A1	20050414	DE 2004-102004020856	20040428

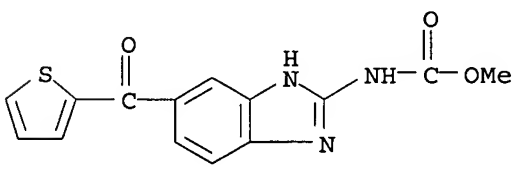
PRIORITY APPLN. INFO.:
DE 2003-10345132 A 20030929
US 2003-516295P P 20031103
DE 2004-102004020856A 20040428
US 2004-571582P P 20040517

AB The invention relates to medical products comprising at least one biocompatible biostable polysulfone coating. Said polysulfone coating makes it possible, via the admixt. of an adequate quantity of at least one hydrophilic polymer, to control the elution kinetics of the at least one antiproliferative, anti-inflammatory, antiphlogistic, and/or antithrombogenic agent that is introduced and/or applied while allowing different agents or agent concns. to be spatially separated with the aid of the layer system of biostable polymers. Also disclosed are a method for producing said medical products and the use thereof particularly in the form of stents for preventing restenosis. Thus a 2 g base-coat solution for spray coating contained 17.6 mg polyethersulfone(Udel form Solvay) in chloroform. The 3 g chloroformic topcoat solution included 25.2 g polyethersulfone and 1,2 mg PVP.

IT **31430-18-9**, Nocodazole
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(biocompatible, biostable coating of medical surfaces composed of polysulfone and hydrophilic polymers)

RN 31430-18-9 HCAPLUS

CN Carbamic acid, [5-(2-thienylcarbonyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



IT **127464-60-2**, Vascular endothelial growth factor
RL: BSU (Biological study, unclassified); BIOL (Biological study)

(inhibitors; biocompatible, biostable coating of medical surfaces composed of polysulfone and hydrophilic polymers)
RN 127464-60-2 HCAPLUS
CN Vascular endothelial growth factor (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L27 ANSWER 2 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:905863 HCAPLUS
DOCUMENT NUMBER: 141:376783
TITLE: Devices and assays for monitoring/measuring cellular dynamics to create subject profiles from primary cells
INVENTOR(S): Kirk, Gregory L.; Kim, Enoch; Ostuni, Emanuele; Schueller, Olivier; Sweetnam, Paul
PATENT ASSIGNEE(S): Surface Logix, Inc., USA
SOURCE: PCT Int. Appl., 266 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004092322	A2	20041028	WO 2004-US11454	20040414
WO 2004092322	A3	20050324		

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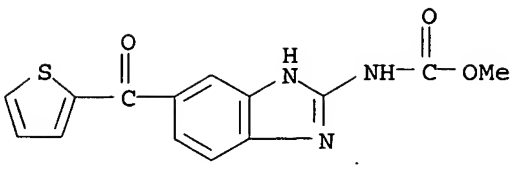
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2003-462315P P 20030414
AB The invention generally relates to devices and methods for patterning cells in a predetd. array for subsequent observation and measurement of cell motility. Devices and methods are described for monitoring the interaction of a cell or group of cells with a substratum and for monitoring cell motility and chemotaxis. In particular, the invention describes devices and methods for monitoring leukocyte migration. The present invention further relates to utilizing the above devices and methods for assaying cellular dynamics and phenotypes to create subject primary cell profiles for patients. Addnl., the present invention relates to methods of correlating primary cell profiles with a therapeutic regimen. Finally, the invention relates to methods for screening test compds. for biol. activities by measuring their effect on primary cell profiles.
IT **31430-18-9**, Nocodazole
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(as microtubule-disrupting agents, effects on motility of HMVEC-L cells; devices and assays for monitoring/measuring cellular dynamics to create subject profiles from primary cells)
RN 31430-18-9 HCAPLUS
CN Carbamic acid, [5-(2-thienylcarbonyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



IT **127464-60-2**, Vascular endothelial growth factor
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(endothelial cell motility response to agonists and antagonists of; devices and assays for monitoring/measuring cellular dynamics to create subject profiles from primary cells)
RN 127464-60-2 HCAPLUS
CN Vascular endothelial growth factor (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

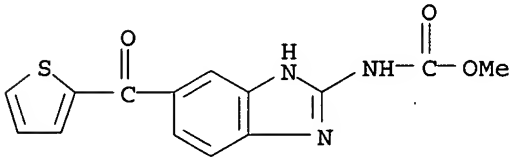
L27 ANSWER 3 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:902199 HCAPLUS
DOCUMENT NUMBER: 141:374704
TITLE: Composition and uses of galectin antagonists to augment treatment of cancer or other proliferative disorders
INVENTOR(S): Chang, Yan; Sasak, Vodek
PATENT ASSIGNEE(S): Glycogenesys, Inc., USA
SOURCE: PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2004091634	A1	20041028	WO 2004-US10675		20040407
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
US 2004023925	A1	20040205	US 2003-408723		20030407
US 2004223971	A1	20041111	US 2004-819901		20040407
PRIORITY APPLN. INFO.:			US 2003-408723	A	20030407
			US 2003-461006P	P	20030407
			US 2003-474562P	P	20030530
			US 2001-299991P	P	20010621
			US 2002-176235	A2	20020620

AB The present invention is directed to methods and compns. for augmenting treatment of cancers and other proliferative disorders. In particular embodiments, the invention combines the administration of an agent that inhibits the anti-apoptotic activity of galectin-3 (e.g., a 'galectin-3 inhibitor') so as to potentiate the toxicity of a chemotherapeutic agent.

In certain preferred embodiments, the conjoint therapies of the present invention can be used to improve the efficacy of those chemotherapeutic agents whose cytotoxicity is influenced by the status of an anti-apoptotic Bcl-2 protein for the treated cell. For instance, galectin-3 inhibitors can be administered in combination with a chemotherapeutic agent that interferes with DNA replication fidelity or cell-cycle progression of cells undergoing unwanted proliferation.

IT **31430-18-9**, Nocodazole
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(composition and uses of galectin antagonists to augment treatment of cancer or other proliferative disorders)
RN 31430-18-9 HCAPLUS
CN Carbamic acid, [5-(2-thienylcarbonyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



IT **127464-60-2**, Vascular endothelial growth factor
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; composition and uses of galectin antagonists to augment treatment of cancer or other proliferative disorders)
RN 127464-60-2 HCAPLUS
CN Vascular endothelial growth factor (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 4 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:857335 HCAPLUS
DOCUMENT NUMBER: 141:343534
TITLE: HIF-1 inhibitors
INVENTOR(S): Van Meir, Erwin; Tan, Chalet; Roecker, Anthony; Nicolaou, Kyriacos C.
PATENT ASSIGNEE(S): Emory University, USA; The Scripps Research Institute T.S.R.I.
SOURCE: PCT Int. Appl., 91 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004087066	A2	20041014	WO 2004-US9548	20040329
WO 2004087066	A3	20050224		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,

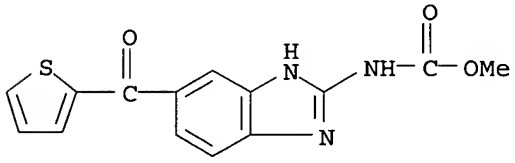
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2003-458218P P 20030327
OTHER SOURCE(S): MARPAT 141:343534

AB HIF-1 inhibitors and methods of their use are provided. In particular, 2,2-dimethylbenzopyran based compds. and methods of their use, for example in the treatment or prevention of hypoxia-related pathologies are provided.

IT **31430-18-9**, Nocodazole
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(HIF-1 inhibitors such as dimethylbenzopyran based compds. for treatment of hypoxia-related diseases in combination with other agents in relation with modulation of gene transcription)

RN 31430-18-9 HCAPLUS
CN Carbamic acid, [5-(2-thienylcarbonyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



IT **127464-60-2**, Vascular endothelial growth factor
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(gene encoding; HIF-1 inhibitors such as dimethylbenzopyran based compds. for treatment of hypoxia-related diseases in combination with other agents in relation with modulation of gene transcription)

RN 127464-60-2 HCAPLUS
CN Vascular endothelial growth factor (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L27 ANSWER 5 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:824082 HCAPLUS
DOCUMENT NUMBER: 141:337708
TITLE: Multi-functional thermoresponsive polymeric materials and their uses as drug carriers
INVENTOR(S): Lowe, Tao Lu; Kim, Young Shin; Huang, Xiao
PATENT ASSIGNEE(S): Penn State Research Foundation, USA
SOURCE: PCT Int. Appl., 72 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004085712	A2	20041007	WO 2004-US8810	20040324
WO 2004085712	A3	20041209		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,

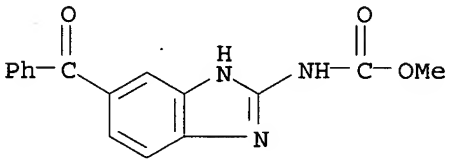
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2003-457499P P 20030324
US 2003-466966P P 20030501
US 2003-519796P P 20031114

AB Multifunctional polymers are disclosed having a smart segment and a biodegradable segment. Advantageously, the biodegradable segment includes a hydrophilic segment and a hydrophobic segment. Embodiments include combining the multifunctional polymeric material with a biol. active substance in an aqueous loading environment and administering the composition as a drug delivery vehicle to a human subject.. For example, a copolymer hydrogel was prepared from N-isopropylacrylamide and diacrylate poly(L-lactic acid) and dextran allyl isocyanate and was loaded with nerve growth factor (NGF) for releasing NGF thermoresponsively.

IT **31431-39-7**, Mebendazole **127464-60-2**, Vascular endothelial growth factor
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(multi-functional polymeric and dendritic hydrogels for drug delivery)

RN 31431-39-7 HCAPLUS
CN Carbamic acid, (5-benzoyl-1H-benzimidazol-2-yl)-, methyl ester (9CI) (CA INDEX NAME)



RN 127464-60-2 HCAPLUS
CN Vascular endothelial growth factor (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L27 ANSWER 6 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:362653 HCAPLUS
DOCUMENT NUMBER: 140:417455
TITLE: Effects of Microtubule-Depolymerizing Agents on the Transfection of Cultured Vascular Smooth Muscle Cells: Enhanced Expression with Free Drug and Especially with Drug-Gene Lipoplexes
AUTHOR(S): Wang, Li; MacDonald, Robert C.
CORPORATE SOURCE: Department of Biochemistry, Molecular Biology and Cell Biology, Northwestern University, Evanston, IL, 60208, USA
SOURCE: Molecular Therapy (2004), 9(5), 729-737
CODEN: MTOHCK; ISSN: 1525-0016
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal

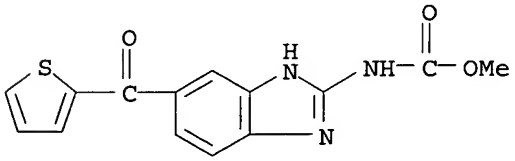
LANGUAGE: English

AB The microtubule-depolymg. agents colchicine, vinblastine (VB), vincristine, nocodazole, and podophyllotoxin were found to increase dramatically the transfection of cationic phospholipid-DNA (CMV-β-gal) complexes on cultured vascular smooth muscle cells (VSMCs). Pretreatment of cells with free colchicine before addition of lipoplexes increased transgene expression both in the presence and in the absence of serum. Free vinblastine had similar effects; however, vinblastine was more effective (.apprx.30-fold maximal stimulation) when incorporated into the lipoplexes. Under optimal conditions, vincristine, nocodazole, and podophyllotoxin produced 25- and 39-, 31- and 14-, and 26- and 14-fold increases in the absence and presence of serum, resp. Taxol, which stabilizes microtubules, had no effect on transfection, but it blocked the pos. effect of colchicine. Cytochalasin B, which inhibits microfilament polymerization, had no effect on transgene expression. By fluorescence microscopy, normal lipoplexes colocalized with lysosomes. In contrast, there was little, if any, colocalization of VB lipoplexes with lysosomes. Because depolymn. of microtubules induces NF-κB-dependent gene expression, the effects of pyrrolidinedithiocarbamate and Nα-p-tosyl-L-lysine chloromethyl ketone, inhibitors of NF-κB activation, were tested; inhibition of vinblastine stimulation of transfection was 85 and 66%, resp. Also, immunofluorescence microscopy showed that vinblastine induced the translocation of NF-κB from the cytoplasm to the nucleus. It is concluded that microtubule-depolymg. agents, especially when incorporated into lipoplexes, dramatically increase transfection of VSMCs, probably by two mechanisms: (i) inhibition of transport of lipoplexes to lysosomes and (ii) activation of transcription (via NF-κB). There have been some reports on the use of pharmaceutical agents to enhance gene expression, but generally these have involved sep. applications of drug and gene. The ability to deliver a drug and a gene in a single therapeutic formulation could have significant clin. implications.

IT **31430-18-9**, Nocodazole
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(effects of microtubule-depolymg. agents on the transfection of cultured vascular smooth muscle cells: enhanced expression with free drug and especially with drug-gene lipoplexes)

RN 31430-18-9 HCAPLUS

CN Carbamic acid, [5-(2-thienylcarbonyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 7 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:331903 HCAPLUS
DOCUMENT NUMBER: 140:337930
TITLE: Anti-CD20 antibody-drug conjugates for the treatment of cancer and immune disorders in mammal and human
INVENTOR(S): Wahl, Alan F.; Senter, Peter D.; Law, Che-leung; Cerveny, Charles G.

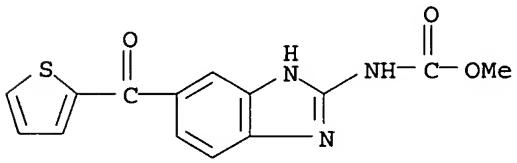
PATENT ASSIGNEE(S): Seattle Genetics, Inc., USA
SOURCE: PCT Int. Appl., 161 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004032828	A2	20040422	WO 2003-US23895	20030730
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2494104	AA	20040422	CA 2003-2494104	20030730
PRIORITY APPLN. INFO.:			US 2002-400404P P	20020731
			WO 2003-US23895 W	20030730

AB The present invention relates to methods and compns. for the treatment of CD20-expressing cancers and immune disorders involving CD20-expressing cells. The present methods comprise administering to a subject an anti CD20 antibody-drug conjugate that has a high potency and/or is capable of internalizing into CD20-expressing cells. The present invention further provides pharmaceutical compns. and kits comprising such conjugates. The present invention yet further provides methods of and compns. relating to combination therapy of cancer and immune disorders involving CD20-expressing cells using the anti-CD20 antibody-drug conjugates of the invention.

IT **31430-18-9D**, Nocodazole, conjugates with anti-CD20 antibody
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anti-CD20 antibody-drug conjugates for the treatment of cancer and immune disorders in mammal and human)

RN 31430-18-9 HCAPLUS
CN Carbamic acid, [5-(2-thienylcarbonyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



L27 ANSWER 8 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:100803 HCAPLUS
DOCUMENT NUMBER: 140:139483
TITLE: Method for enhancing the effectiveness of therapies of hyperproliferative diseases
INVENTOR(S): Chang, Yan; Sasak, Vodek
PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 14 pp., Cont.-in-part of U.S. Ser. No. 176,235.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004023925	A1	20040205	US 2003-408723	20030407
US 2003013681	A1	20030116	US 2002-176235	20020620
US 6680306	B2	20040120		
US 2004043962	A1	20040304	US 2003-657383	20030908
WO 2004091634	A1	20041028	WO 2004-US10675	20040407

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
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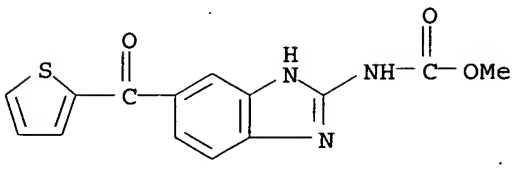
PRIORITY APPLN. INFO.:

US 2001-299991P	P	20010621
US 2002-176235	A2	20020620
US 2003-408723	A	20030407
US 2003-461006P	P	20030407
US 2003-474562P	P	20030530

AB The efficacy of conventional cancer therapies such as surgery, chemotherapy and radiation is enhanced by the use of a therapeutic material which binds to and interacts with galectins. The therapeutic material can enhance apoptosis thereby increasing the effectiveness of oncolytic agents. It can also inhibit **angiogenesis** thereby moderating tumor growth and/or metastasis.

IT **127464-60-2**, Vascular endothelial growth factor
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(method for enhancing effectiveness of therapies of hyperproliferative diseases)
RN 127464-60-2 HCAPLUS
CN Vascular endothelial growth factor (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **31430-18-9**, Nocodazole
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(method for enhancing effectiveness of therapies of hyperproliferative diseases)
RN 31430-18-9 HCAPLUS
CN Carbamic acid, [5-(2-thienylcarbonyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



L27 ANSWER 9 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:60255 HCAPLUS
DOCUMENT NUMBER: 140:105258
TITLE: Benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms
INVENTOR(S): Borisy, Alexis; Keith, Curtis; Foley, Michael A.; Stockwell, Brent R.; Gaw, Debra A.
PATENT ASSIGNEE(S): Combinatorx, Incorporated, USA
SOURCE: PCT Int. Appl., 79 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004006849	A2	20040122	WO 2003-US21984	20030715
WO 2004006849	A3	20040603		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
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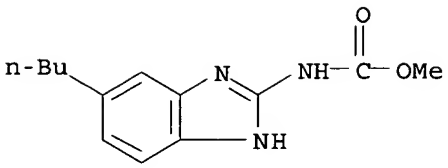
PRIORITY APPLN. INFO.: US 2002-396151P P 20020715
OTHER SOURCE(S): MARPAT 140:105258

AB The invention features a method for treating a patient having a cancer or other neoplasm, by administering to the patient (i) a benzimidazole or a metabolite or analog thereof; and (ii) pentamidine or a metabolite or analog thereof simultaneously or within 14 days of each other in amts. sufficient to inhibit the growth of the neoplasm.

IT **14255-87-9**, Parbendazole **20559-55-1**, Oxibendazole **31430-15-6**, Flubendazole **31430-18-9**, Nocodazole **31431-39-7**, Mebendazole **31431-39-7D**, Mebendazole, derivs. **31431-43-3**, Cyclobendazole **43210-67-9**, Fenbendazole **53716-50-0**, Oxfendazole **54029-12-8**, Albendazole sulfoxide **54965-21-8**, Albendazole **54965-21-8D**, Albendazole, derivs. **75184-71-3**, Albendazole sulfone **90509-02-7**, Luxabendazole
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms)

RN 14255-87-9 HCAPLUS
CN Carbamic acid, (5-butyl-1H-benzimidazol-2-yl)-, methyl ester (9CI) (CA

INDEX NAME)



RN 20559-55-1 HCAPLUS
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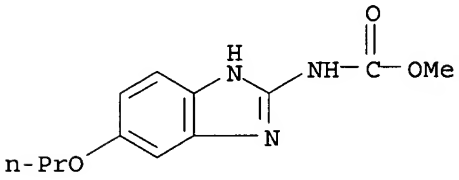
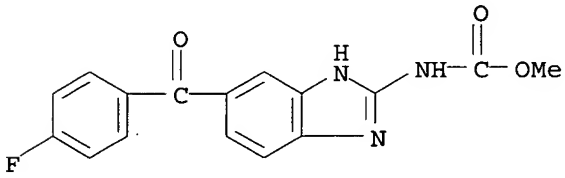
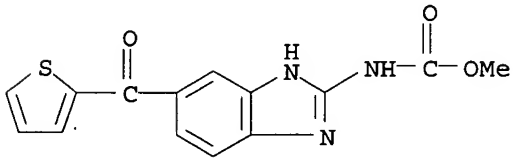


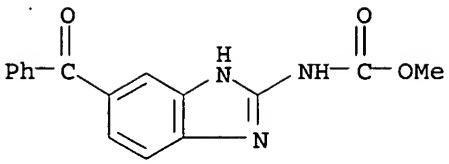
RN 31430-15-6 HCAPLUS
CN Carbamic acid, [5-(4-fluorobenzoyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



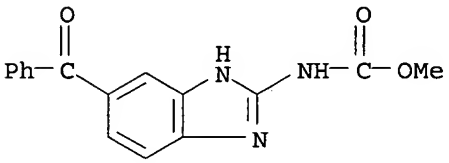
RN 31430-18-9 HCAPLUS
CN Carbamic acid, [5-(2-thienylcarbonyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



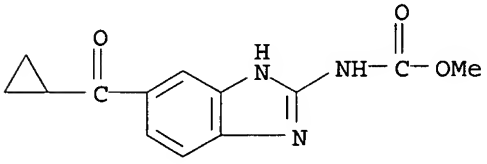
RN 31431-39-7 HCAPLUS
CN Carbamic acid, (5-benzoyl-1H-benzimidazol-2-yl)-, methyl ester (9CI) (CA INDEX NAME)



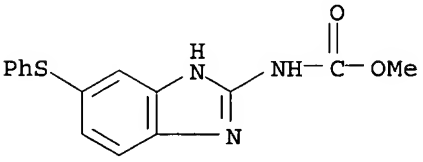
RN 31431-39-7 HCAPLUS
CN Carbamic acid, (5-benzoyl-1H-benzimidazol-2-yl)-, methyl ester (9CI) (CA INDEX NAME)



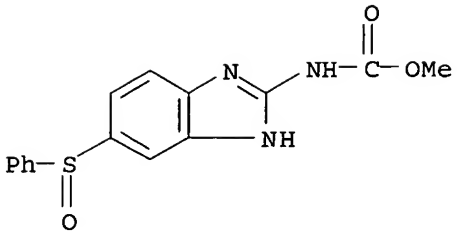
RN 31431-43-3 HCAPLUS
CN Carbamic acid, [5-(cyclopropylcarbonyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



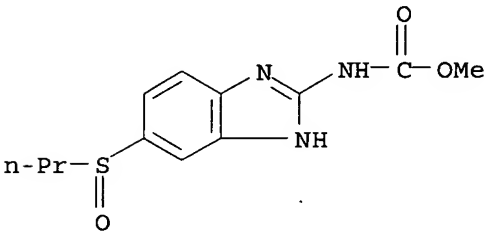
RN 43210-67-9 HCAPLUS
CN Carbamic acid, [5-(phenylthio)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



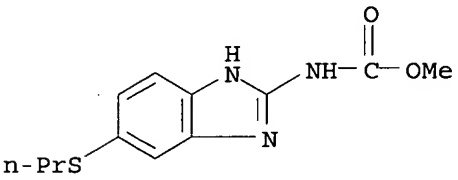
RN 53716-50-0 HCAPLUS
CN Carbamic acid, [5-(phenylsulfinyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



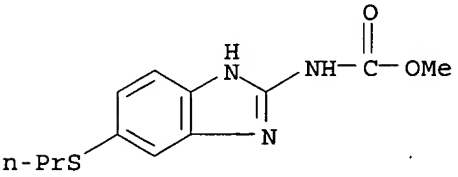
RN 54029-12-8 HCAPLUS
CN Carbamic acid, [5-(propylsulfinyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



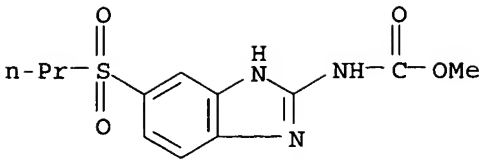
RN 54965-21-8 HCAPLUS
CN Carbamic acid, [5-(propylthio)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



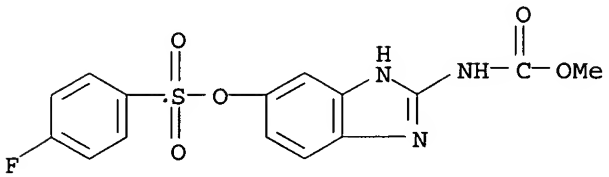
RN 54965-21-8 HCAPLUS
CN Carbamic acid, [5-(propylthio)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



RN 75184-71-3 HCAPLUS
CN Carbamic acid, [5-(propylsulfonyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



RN 90509-02-7 HCAPLUS
CN Benzenesulfonic acid, 4-fluoro-, 2-[(methoxycarbonyl)amino]-1H-benzimidazol-5-yl ester (9CI) (CA INDEX NAME)



L27 ANSWER 10 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:41226 HCAPLUS
DOCUMENT NUMBER: 140:105321
TITLE: Methods and compositions relating to isoleucine boroproline compounds
INVENTOR(S): Adams, Sharlene; Miller, Glenn T.; Jesson, Michael I.; Jones, Barry
PATENT ASSIGNEE(S): Point Therapeutics, Inc., USA
SOURCE: PCT Int. Appl., 152 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

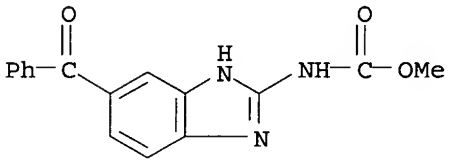
PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2004004658	A2	20040115	WO 2003-US21405		20030709
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZW					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
CA 2491466	AA	20040115	CA 2003-2491466		20030709
US 2004077601	A1	20040422	US 2003-616694		20030709
US 2005084490	A1	20050421	US 2003-616409		20030709
PRIORITY APPLN. INFO.:			US 2002-394856P	P	20020709
			US 2002-414978P	P	20021001
			US 2003-466435P	P	20030428
			WO 2003-US21405	W	20030709

OTHER SOURCE(S): MARPAT 140:105321
AB A method for treating subjects with, inter alia, abnormal cell

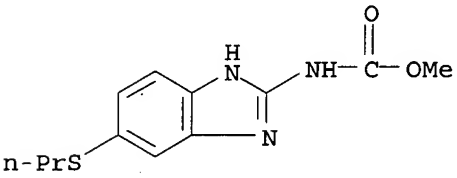
proliferation or infectious disease using agents of formula (I, AmNHCH(CH(CH3)CH2CH3)COA1R) (where Am and A1 are amino acids and R = organo boronates, organo phosphonates, fluoroalkyl ketones, alphaketos, N-peptiolyl-O-(acylhydroxylamines), azapeptides, azetidines, fluoroolefins dipeptide isosteres, peptidyl (α-aminoalkyl) phosphonate esters, aminoacyl pyrrolidine-2-nitriles and 4-cyanothiazolidides) is claimed. Methods for stimulating an immune response using the compds. of the invention are also claimed. Compns. containing Ile-boroPro compds. are also provided as are kits containing the compns. The invention embraces the use of these compds. alone or in combination with other therapeutic agents.

IT **31431-39-7**, Mebendazole **54965-21-8**, Albendazole **127464-60-2**, Vascular endothelial growth factor
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(therapeutic methods and compns. relating to isoleucine boroproline compds. alone or in combination with other drugs, antibodies, or antigens)

RN 31431-39-7 HCAPLUS
CN Carbamic acid, (5-benzoyl-1H-benzimidazol-2-yl)-, methyl ester (9CI) (CA INDEX NAME)



RN 54965-21-8 HCAPLUS
CN Carbamic acid, [5-(propylthio)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



RN 127464-60-2 HCAPLUS
CN Vascular endothelial growth factor (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L27 ANSWER 11 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:913055 HCAPLUS
DOCUMENT NUMBER: 139:399770
TITLE: Medical goods comprising heparin or chitosan-based hemocompatible coating
INVENTOR(S): Horres, Roland; Linssen, Marita Katharina; Hoffmann, Michael; Faust, Volker; Hoffmann, Erika; Di Biase, Donato
PATENT ASSIGNEE(S): Hemoteq G.m.b.H., Germany
SOURCE: PCT Int. Appl., 93 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

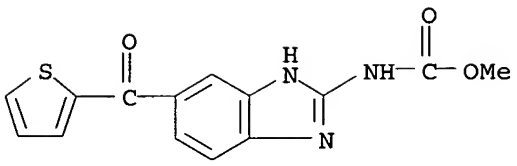
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2003094990	A1	20031120	WO 2003-DE1253		20030415
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
DE 10221055	A1	20031127	DE 2002-10221055		20020510
DE 10261986	A1	20040318	DE 2002-10261986		20020510
CA 2484269	AA	20031120	CA 2003-2484269		20030415
EP 1501565	A1	20050202	EP 2003-729829		20030415
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK					
BR 2003011446	A	20050315	BR 2003-11446		20030415
PRIORITY APPLN. INFO.:			US 2002-378676P	P	20020509
			DE 2002-10221055	A	20020510
			WO 2003-DE1253	W	20030415

AB The invention relates to oligo- and polysaccharides containing the sugar structural element N-acylglucosamine or N-acylgalactosamine, in addition to the use thereof for producing hemocompatible surfaces and to methods for coating surfaces in a hemocompatible manner with said oligo- and polysaccharides, which constitute the common biosynthetic precursor substances of heparin, heparan sulfates and chitosan. The invention also relates to methods for producing the oligo- and/or polysaccharides, in addition to diverse application options involving hemocompatible surfaces. The invention specifically relates to the use of the oligo- and/or polysaccharides on stents involving at least one hemocompatible coating that has been applied according to the invention and that contains an anti-proliferative, anti-inflammatory and/or athrombogenic active ingredient, to methods for producing said stents and to the use of the latter for preventing restenosis. Thus desulfated and reacetylated heparin was prepared; the Ac-heparin product was used for coating coronary metal stents. The stents were implanted in swines; after four weeks the animals were anesthetized and the artery segments removed for histomorphometric anal.

IT **127464-60-2**, Vascular endothelial growth factor
RL: BSU (Biological study, unclassified); BIOL (Biological study) (inhibitors of; medical goods comprising a heparin-based hemocompatible coating)
RN 127464-60-2 HCAPLUS
CN Vascular endothelial growth factor (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **31430-18-9**, Nocodazole
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (medical goods comprising a heparin-based hemocompatible coating)
RN 31430-18-9 HCAPLUS
CN Carbamic acid, [5-(2-thienylcarbonyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 12 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:551331 HCAPLUS
DOCUMENT NUMBER: 139:129670
TITLE: Modulation of mitochondrial remodeling by BH3 interacting domain death agonist and uses in treating apoptosis
INVENTOR(S): Korsmeyer, Stanley
PATENT ASSIGNEE(S): Dana-Farber Cancer Institute, Inc., USA; Scorrano, Luca
SOURCE: PCT Int. Appl., 91 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003057158	A2	20030717	WO 2002-US41789	20021230
WO 2003057158	A3	20040212		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2471719	AA	20030717	CA 2002-2471719	20021230
US 2003224986	A1	20031204	US 2002-334006	20021230
EP 1469871	A2	20041027	EP 2002-799347	20021230
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				

PRIORITY APPLN. INFO.:
US 2001-345733P P 20011231
US 2002-382207P P 20020521
WO 2002-US41789 W 20021230

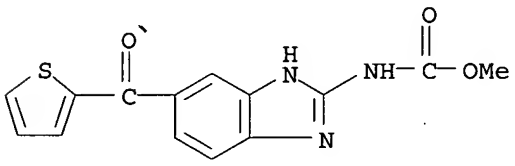
AB This invention relates generally to methods and compns. for the regulation of apoptosis and novel BH3 interacting domain death agonist, BID, polypeptide variants of BID, and the polynucleotides encoding them for modulating mitochondrial remodeling, the release of cytochrome c store in mitochondrial cristae and apoptosis. Also disclosed are antibodies that immunospecifically bind to the polypeptide, as well as derivs., variants, mutants, or fragments of the novel polypeptide, polynucleotide, or antibody specific to the polypeptide. Vectors, host cells, antibodies and recombinant methods for producing the polypeptides and polynucleotides, as well as methods for using same are also included. The invention further

discloses therapeutic, diagnostic and research methods for diagnosis, treatment, and prevention of apoptosis associated disorders involving these novel human nucleic acids and proteins.

IT **127464-60-2**, Vascular endothelial growth factor
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(as anti-**angiogenic** agent; modulation of mitochondrial remodeling by BH3 interacting domain death agonist and uses in treating apoptosis)
RN 127464-60-2 HCAPLUS
CN Vascular endothelial growth factor (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **31430-18-9**, Nocodazole
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(for chemotherapy; modulation of mitochondrial remodeling by BH3 interacting domain death agonist and uses in treating apoptosis)
RN 31430-18-9 HCAPLUS
CN Carbamic acid, [5-(2-thienylcarbonyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



L27 ANSWER 13 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:438110 HCAPLUS
DOCUMENT NUMBER: 139:207352
TITLE: Non-steroidal anti-inflammatory drugs (NSAIDs) inhibit vascular smooth muscle cell proliferation via differential effects on the cell cycle
AUTHOR(S): Brooks, Gavin; Yu, Xue-Mei; Wang, Yuequn; Crabbe, M. James C.; Shattock, Michael J.; Harper, Jane V.
CORPORATE SOURCE: Cardiovascular Research Group, Division of Cell and Molecular Biology, School of Animal and Microbial Sciences, The University of Reading, Reading, RG6 6AJ, UK
SOURCE: Journal of Pharmacy and Pharmacology (2003), 55(4), 519-526
CODEN: JPPMAB; ISSN: 0022-3573
PUBLISHER: Pharmaceutical Press
DOCUMENT TYPE: Journal
LANGUAGE: English

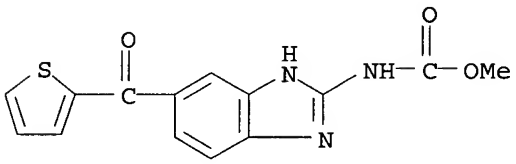
AB Abnormal vascular smooth muscle cell (VSMC) proliferation plays an important role in the pathogenesis of both atherosclerosis and restenosis. Recent studies suggest that high-dose salicylates, in addition to inhibiting cyclooxygenase activity, exert an antiproliferative effect on VSMC growth both in-vitro and in-vivo. However, whether all non-steroidal anti-inflammatory drugs (NSAIDs) exert similar antiproliferative effects on VSMCs, and do so via a common mechanism of action, remains to be shown. In this study, we demonstrate that the NSAIDs aspirin, sodium salicylate, diclofenac, ibuprofen, indometacin and sulindac induce a dose-dependent inhibition of proliferation in rat A10 VSMCs in the absence of significant

cytotoxicity. Flow cytometric analyses showed that exposure of A10 cells to diclofenac, indometacin, ibuprofen and sulindac, in the presence of the mitotic inhibitor, nocodazole, led to a significant G0/G1 arrest. In contrast, the salicylates failed to induce a significant G1 arrest since flow cytometry profiles were not significantly different from control cells. Cyclin A levels were elevated, and hyperphosphorylated p107 was present at significant levels, in salicylate-treated A10 cells, consistent with a post-G1/S block, whereas cyclin A levels were low, and hypophosphorylated p107 was the dominant form, in cells treated with other NSAIDs consistent with a G1 arrest. The ubiquitously expressed cyclin-dependent kinase (CDK) inhibitors, p21 and p27, were increased in all NSAID-treated cells. Our results suggest that diclofenac, indometacin, ibuprofen and sulindac inhibit VSMC proliferation by arresting the cell cycle in the G1 phase, whereas the growth inhibitory effect of salicylates probably affects the late 5 and/or G2/M phases. Irresp. of mechanism, our results suggest that NSAIDs might be of benefit in the treatment of certain vasculoproliferative disorders.

IT **31430-18-9**, Nocodazole
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(effect of different NSAIDs on vascular smooth muscle cell proliferation, differentiation, cell cycle, and CDK inhibitors regulation)

RN 31430-18-9 HCAPLUS

CN Carbamic acid, [5-(2-thienylcarbonyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 14 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:364661 HCAPLUS

DOCUMENT NUMBER: 139:143260

TITLE: Relative hydrophobicity and lipophilicity of drugs measured by aqueous two-phase partitioning, octanol-buffer partitioning and HPLC. A simple model for predicting blood-brain distribution

AUTHOR(S): Gulyaeva, Nellie; Zaslavsky, Alexander; Lechner, Pamela; Chlenov, Michael; McConnell, Oliver; Chait, Arnon; Kipnis, Victor; Zaslavsky, Boris

CORPORATE SOURCE: Analiza, Inc., Cleveland, OH, 44128, USA

SOURCE: European Journal of Medicinal Chemistry (2003), 38(4), 391-396
CODEN: EJMCA5; ISSN: 0223-5234

PUBLISHER: Editions Scientifiques et Medicales Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

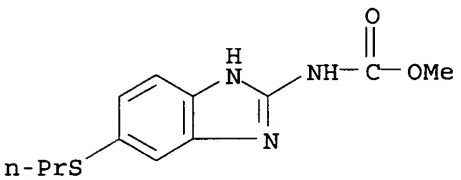
AB Relative hydrophobicity and lipophilicity of 63 compds. with known permeability through the blood-brain barrier (BBB) was examined by partitioning in aqueous dextran-poly(ethylene glycol) two-phase system and octanol-buffer system, and by gradient RP-HPLC at pH 7.4. Combination of

the relative hydrophobicity ests., N(CH2) obtained by aqueous two-phase partitioning and the lipophilicity (log Dexp or log DHPLC) values obtained by the shake-flask technique or HPLC technique allows one to differentiate between compds. capable of crossing the BBB and those that cannot. A simple model for predicting blood-brain distribution is proposed.

IT **54965-21-8**, Albendazole
RL: ANT (Analyte); PKT (Pharmacokinetics); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(relative hydrophobicity and lipophilicity of drugs measured by aqueous two-phase partitioning, octanol-buffer partitioning and HPLC, a model for predicting blood-brain distribution)

RN 54965-21-8 HCAPLUS

CN Carbamic acid, [5-(propylthio)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 15 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:154681 HCAPLUS
DOCUMENT NUMBER: 138:180673
TITLE: Systems and methods for screening pharmaceutical chemicals
INVENTOR(S): Elson, Elliot; McConnaughey, William B.; Wakatsuki, Tetsuro
PATENT ASSIGNEE(S): Washington University in St. Louis, USA
SOURCE: PCT Int. Appl., 79 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003016860	A2	20030227	WO 2002-US25761	20020814
WO 2003016860	A3	20030612		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003064358	A1	20030403	US 2002-219097	20020814
EP 1425385	A2	20040609	EP 2002-752832	20020814
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

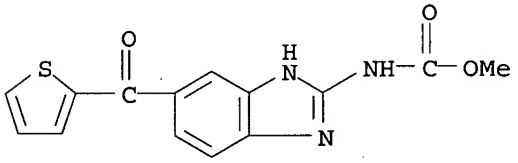
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
PRIORITY APPLN. INFO.: US 2001-312322P P 20010814
WO 2002-US25761 W 20020814

AB A method for obtaining a response of a tissue model system to an activator includes contacting a bio-artificial tissue model system with an activator and measuring cellular mech. response thereto of at least one of contractile force and tissue stiffness. A method for obtaining a response of a tissue model system to an activator includes contacting a bio-artificial tissue model system with an activator and measuring cellular mech. response thereto of at least one of contractile force and hysteresis.

IT **31430-18-9**, Nocodazole
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(systems and methods for screening pharmaceutical chems.)

RN 31430-18-9 HCAPLUS

CN Carbamic acid, [5-(2-thienylcarbonyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



L27 ANSWER 16 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:781148 HCAPLUS
DOCUMENT NUMBER: 138:331299
TITLE: Mebendazole elicits a potent antitumor effect on human cancer cell lines both in vitro and in vivo
AUTHOR(S): Mukhopadhyay, Tapas; Sasaki, Ji-ichiro; Ramesh, Rajagopal; Roth, Jack A.
CORPORATE SOURCE: Department of Thoracic and Cardiovascular Surgery, The University of Texas M. D. Anderson Cancer Center, Houston, TX, 77030, USA
SOURCE: Clinical Cancer Research (2002), 8(9), 2963-2969
CODEN: CCREF4; ISSN: 1078-0432
PUBLISHER: American Association for Cancer Research
DOCUMENT TYPE: Journal
LANGUAGE: English

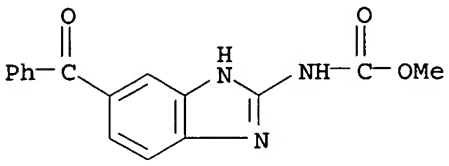
AB The authors have found that mebendazole (MZ), a derivative of benzimidazole, induces a dose- and time-dependent apoptotic response in human lung cancer cell lines. In this study, MZ arrested, cells at the G2-M phase before the onset of apoptosis, as detected by using fluorescence-activated cell sorter anal. MZ treatment also resulted in mitochondrial cytochrome c release, followed by apoptotic cell death. Addnl., MZ appeared to be a potent inhibitor of tumor cell growth with little toxicity to normal WI38 and human umbilical vein endothelial cells. When administered p.o. to nu/nu mice, MZ strongly inhibited the growth of human tumor xenografts and significantly reduced the number and size of tumors in an exptl. model of lung metastasis. In assessing **angiogenesis**, the authors found significantly reduced vessel densities in MZ-treated mice compared with those in control mice. These results suggest that MZ is effective in the treatment of cancer and other **angiogenesis**-dependent diseases.

IT **31431-39-7**, Mebendazole
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(mebendazole elicits potent antitumor effect on human cancer cell lines both in vitro and in vivo and mechanisms involved)

RN 31431-39-7 HCAPLUS

CN Carbamic acid, (5-benzoyl-1H-benzimidazol-2-yl)-, methyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 17 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:594653 HCAPLUS

DOCUMENT NUMBER: 137:145590

TITLE: Polymer carriers for sustained release local delivery of drugs for ablation of unwanted tissue

INVENTOR(S): Richardson, Thomas; Mooney, David J.

PATENT ASSIGNEE(S): The Regents of the University of Michigan, USA

SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002060410	A2	20020808	WO 2002-US2420	20020130
WO 2002060410	A3	20021010		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003022856	A1	20030130	US 2002-58835	20020130

PRIORITY APPLN. INFO.: US 2001-264713P P 20010130

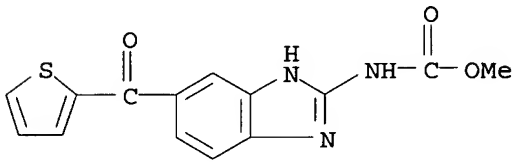
AB Methods for ablation, i.e., elimination or reduction, of unwanted tissue, particularly tissue which is normal to be present in the body but is unwanted for either health or cosmetic reasons are described. In particular, methods for elimination of fat tissue from the body are described. A drug which acts to eliminate the undesired tissue is provided in a carrier which is biocompatible, capable of being administered by injection, and which enables a controlled release of the drug over time. The drug with carrier is administered by injection locally in the area of the unwanted tissue, resulting in elimination of the tissue in that local area. For example, poly(lactide-co-glycolide) (PLG) microspheres containing tumor necrosis factor-α (TNF-α) were prepared by a double emulsion technique and lyophilized. Microspheres

containing 1 or 25 μg TNF-α were suspended in sterile PBS and injected into the contralateral epididymis of rats. Following an initial burst period in the first few days, TNF-α exhibited essentially zero-order release kinetics. After about 7 wk, about 25% of TNF-α was released. The localized ablation of fat mass in vivo by the sustained delivery of TNF-α from the microspheres was observed Delivery of either 1 or 25 μg of TNF-α resulted in a drop of regional fat pad weight to about 85% that of the contralateral control tissue. Relatively small amts. of TNF-α (1 μg) were required to produce changes in the tissue. When a larger amount of TNF-α was injected, there was no significant change in the fat pad loss compared to the loss obtained with a smaller amount of TNF-α, indicating that the sustained release of a relatively small quantity of TNF-α can produce changes in fat pad mass. This also suggests that these is a saturation point in the process of fat ablation, indicating that the amount of the drug administered may not be as important as providing a sustained release of a smaller amount of drug over time.

IT **31430-18-9**, Nocodazole
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polymer carriers for sustained release local delivery of drugs for ablation of unwanted tissue)

RN 31430-18-9 HCAPLUS

CN Carbamic acid, [5-(2-thienylcarbonyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



L27 ANSWER 18 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:545738 HCAPLUS

DOCUMENT NUMBER: 137:197742

TITLE: A quartz crystal microbalance cell biosensor: detecting nocodazole dependent microtubule disruption dynamics in living cells

AUTHOR(S): Marx, Kenneth A.; Zhou, Tiean; Montrone, Anne; Braunhut, Susan J.

CORPORATE SOURCE: Center for Intelligent Biomaterials, University of Massachusetts, Lowell, MA, 01854, USA

SOURCE: Materials Research Society Symposium Proceedings (2002), 711(Advanced Biomaterials: Characterization, Tissue Engineering and Complexity), 125-132
CODEN: MRSPDH; ISSN: 0272-9172

PUBLISHER: Materials Research Society

DOCUMENT TYPE: Journal

LANGUAGE: English

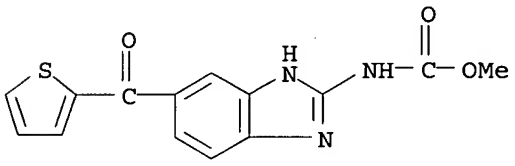
AB A Quartz Crystal Microbalance (QCM) was used to create a biosensor utilizing living adherent endothelial cells (ECs) as the biol. sensing element. This EC QCM biosensor detected the effect of varying concns. of nocodazole, a microtubule binding and disrupting drug, on the adherent cells as they altered the underlying QCM device state frequency, Δf, and motional Resistance, ΔR, shift values. Over the dose range 0.11-15 μM nocodazole, the Δf shift values decreased significantly in magnitude in a dose dependent fashion over a 5-6 h

incubation period following drug addition to a limiting value, with a 900 nM midpoint. This effect is consistent with nocodazole's known dose dependent effect on the disruption of microtubules. At all drug concns., the relative Δf decrease with time was found to be very similar and well fit by a single exponential decay equation. For all nocodazole doses, t0.5 was invariant, averaging t0.5 = 0.83±0.14 h. These data demonstrate that a single dynamic sensing system within the cell, the microtubules, responds to the addition of nocodazole and its response can be quantified by the biosensor. These results indicate that the EC QCM biosensor can be used to detect EC cytoskeletal alterations and dynamics and may be a valuable screening method for all classes of biol. active drugs or biol. macromols. that affect cytoskeleton perturbations or cellular attachment.

IT **31430-18-9**, Nocodazole
RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
(quartz crystal microbalance cell biosensor detecting nocodazole dependent microtubule disruption dynamics in living cells)

RN 31430-18-9 HCAPLUS

CN Carbamic acid, [5-(2-thienylcarbonyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 19 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:521462 HCAPLUS

DOCUMENT NUMBER: 137:88442

TITLE: Incensole and furanogermacrens and compounds in treatment for inhibiting neoplastic lesions and microorganisms

INVENTOR(S): Shanahan-Pendergast, Elisabeth

PATENT ASSIGNEE(S): Ire.

SOURCE: PCT Int. Appl., 68 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002053138	A2	20020711	WO 2002-IE1	20020102
WO 2002053138	A3	20020919		
W: AE, AG, AT, AU, BB, BG, CA, CH, CN, CO, CU, CZ, LU, LV, MA, MD, UA, UG, US, VN, YU, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, AT, BE, CH, CY, DE, ES, FI, ML, MR, NE, SN, TD, TG				
EP 1351678	A2	20031015	EP 2002-727007	20020102
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

US 2004092583	A1	20040513	US 2004-250535		20040102
PRIORITY APPLN. INFO.:			IE 2001-2	A	20010102
			WO 2002-IE1	W	20020102

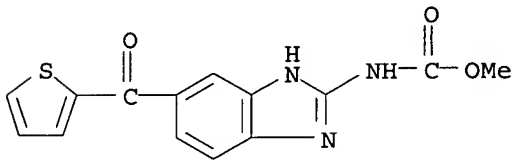
OTHER SOURCE(S): MARPAT 137:88442

AB The invention discloses the use of incensole and/or furanogermacrens, derivs. metabolites and precursors thereof in the treatment of neoplasia, particularly resistant neoplasia and immunodysregulatory disorders. These compds. can be administered alone or in combination with conventional chemotherapeutic, antiviral, antiparasite agents, radiation and/or surgery. Incensole and furanogermacren and their mixture showed antitumor activity against various human carcinomas and melanomas and antimicrobial activity against Staphylococcus aureus and Enterococcus faecalis.

IT **31430-18-9**, Nocodazole
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

RN 31430-18-9 HCAPLUS

CN Carbamic acid, [5-(2-thienylcarbonyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



L27 ANSWER 20 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:275787 HCAPLUS
DOCUMENT NUMBER: 136:304045
TITLE: Inhibitors of **angiogenesis** and tumor growth for local and systemic administration
INVENTOR(S): Singh, Saira Sayed
PATENT ASSIGNEE(S): Oncopharmaceutical, Inc., USA
SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002028387	A1	20020411	WO 2001-US30986	20011003
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001096558	A5	20020415	AU 2001-96558	20011003
US 2002061303	A1	20020523	US 2001-971062	20011003
US 6696483	B2	20040224		

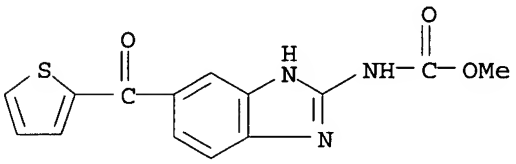
PRIORITY APPLN. INFO.: US 2000-237429P P 20001003
WO 2001-US30986 W 20011003

AB The invention provides pharmaceutical formulations and methods for the treatment of individuals suffering from a condition, disease, or disorder that is treatable by the inhibition of **angiogenesis.** The compns. comprise a Golgi apparatus disturbing agent in a substantially nontoxic amount effective to inhibit **angiogenesis** in a patient in need of anti-**angiogenesis** therapy, a solvent, and a pharmaceutically acceptable carrier. In preferred formulations, the Golgi apparatus disturbing agent is brefeldin A.

IT **31430-18-9**, Nocodazole
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibitors of **angiogenesis** and tumor growth for local and systemic administration)

RN 31430-18-9 HCAPLUS

CN Carbamic acid, [5-(2-thienylcarbonyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)

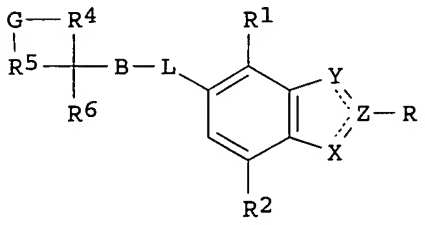


REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 21 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:157741 HCAPLUS
DOCUMENT NUMBER: 136:200190
TITLE: Benzimidazoles and analogues and their use as neutrophil inhibitors
INVENTOR(S): Bush, Rodney Dean; Hershberger, Paul Mitchell; Young, Judith Anne; Kasibhatla, Bhavani
PATENT ASSIGNEE(S): The Procter & Gamble Company, USA
SOURCE: PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002016327	A1	20020228	WO 2001-US25224	20010810
WO 2002016327	C1	20020801		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001081246	A5	20020304	AU 2001-81246	20010810

US 2004006104 A1 20040108 US 2003-368261 20030218
PRIORITY APPLN. INFO.: US 2000-227201P P 20000823
WO 2001-US25224 A1 20010810
OTHER SOURCE(S): MARPAT 136:200190
GI



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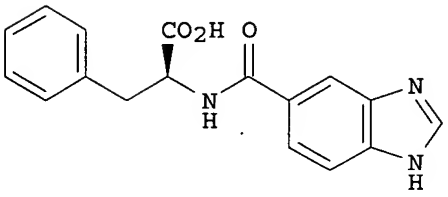


II

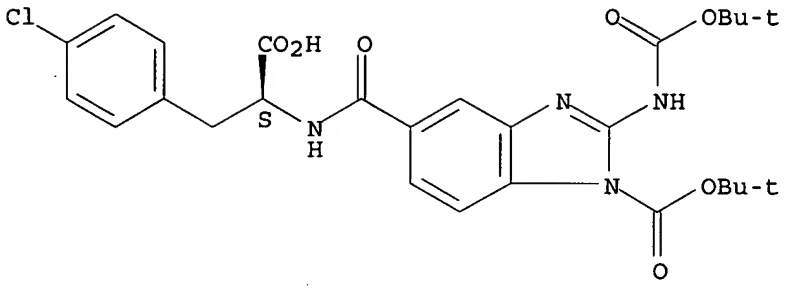
AB Title compds. I [X, Y = heteroatoms wherein at least X or Y is (un)substituted nitrogen; Z = C, two C atoms or a heteroatom; R = alkyl, aromatic ring, carbocyclic aliphatic ring, halo, haloalkyl, heteroalkyl, heterocyclyl, H, OH, NH2, SH, OCH3; R1-2 = alkyl, aromatic, carbocyclic aliphatic, halo(alkyl), heteroalkyl, heterocyclic aliphatic, H; L = C:O-A-NR3, NR3-A-C:O, R3N-A-C:O-A-NR3; A = alkyl, bond; R3 = alkyl, aromatic ring, carbocyclic aliphatic ring, haloalkyl, heteroalkyl, heterocyclyl, H; B = alkyl, haloalkyl, heteroalkyl, bond; G = nil or a substituent that links R4-5 into a cyclic ring structure; if G is nil, R4 = alkyl-carboxy, aryl-carboxy, etc.; R5 = H, alkyl, aromatic ring, carbocyclic aliphatic ring, halo(alkyl), heteroalkyl, heterocyclic aliphatic ring, etc.; R6 = alkyl, aromatic ring, carbocyclic aliphatic ring, halo, haloalkyl, heteroalkyl, lower heteroalkyl, etc.] were prepared For instance, 5-benzimidazolecarboxylic acid was coupled to L-phenylalanine benzyl ester (DMF, EDAC, HOBt, Et3N) and the resulting amide debenzylated (MeOH, H2-Pd/C) to give II. Compds. I are useful for the treatment and prevention of diseases and conditions associated with undesirable or abnormal inflammatory responses, such as ischemia-reperfusion injury.:.

IT **401791-63-7P**
RL: BYP (Byproduct); PREP (Preparation)
(intermediate; benzimidazoles and analogs and use as neutrophil inhibitors)

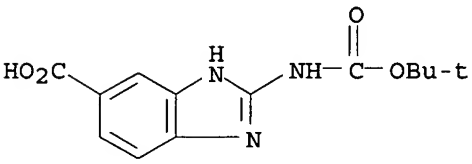
RN 401791-63-7 HCAPLUS

CN 1H-Benzimidazole-1-carboxylic acid, 5-[[[(1S)-1-carboxy-2-(4-chlorophenyl)ethyl]amino]carbonyl]-2-[[(1,1-dimethylethoxy)carbonyl]amino]-, 1-(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

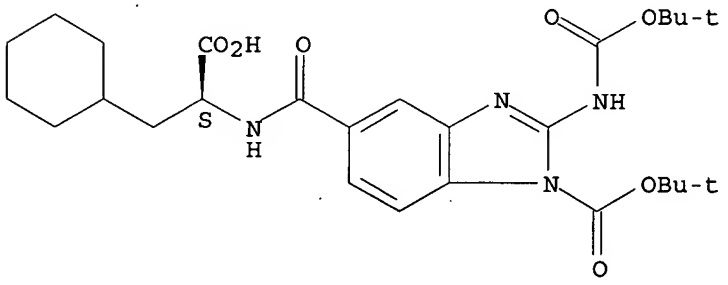


IT **401791-52-4P 401791-62-6P 401791-65-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; benzimidazoles and analogs and use as neutrophil inhibitors)
RN 401791-52-4 HCAPLUS
CN 1H-Benzimidazole-5-carboxylic acid, 2-[[(1,1-dimethylethoxy)carbonyl]amino]- (9CI) (CA INDEX NAME)



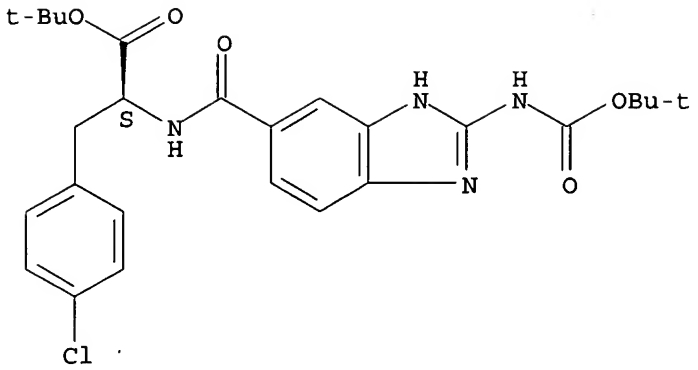
RN 401791-62-6 HCAPLUS
CN 1H-Benzimidazole-1-carboxylic acid, 5-[[[(1S)-1-carboxy-2-cyclohexylethyl]amino]carbonyl]-2-[[(1,1-dimethylethoxy)carbonyl]amino]-, 1-(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 401791-65-9 HCAPLUS
CN L-Phenylalanine, 4-chloro-N-[[2-[[(1,1-dimethylethoxy)carbonyl]amino]-1H-benzimidazol-5-yl]carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 22 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:773512 HCAPLUS
DOCUMENT NUMBER: 136:193555
TITLE: A quartz crystal microbalance cell biosensor: detection of microtubule alterations in living cells at nM nocodazole concentrations
AUTHOR(S): Marx, Kenneth A.; Zhou, Tiean; Montrone, Anne; Schulze, Heather; Braunhut, Susan J.
CORPORATE SOURCE: Department of Chemistry, Center for Intelligent Biomaterials, University of Massachusetts, Lowell, MA, 01854, USA
SOURCE: Biosensors & Bioelectronics (2001), 16(9-12), 773-782
CODEN: BBIOE4; ISSN: 0956-5663
PUBLISHER: Elsevier Science S.A.
DOCUMENT TYPE: Journal
LANGUAGE: English

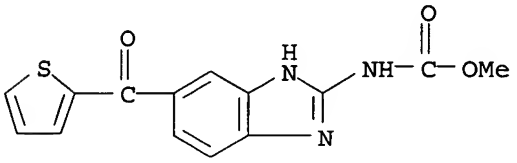
AB The quartz crystal microbalance (QCM) was used to create a piezoelec. biosensor utilizing living endothelial cells (ECs) as the biol. signal transduction element. ECs adhere to the hydrophilically treated gold QCM surface under growth media containing serum. At 24 h following cell addition, calibration curves were constructed relating the steady state Δf and ΔR shift values observed to the nos. of electronically counted cells requiring trypsinization to be removed from the surface. We then utilized this EC QCM biosensor for the detection of the effect of [nocodazole] on the steady state Δf and ΔR shift values. Nocodazole, a known microtubule binding drug, alters the cytoskeletal properties of living cells. At the doses used in these studies (0.11-15 μM), nocodazole, in a dose dependent fashion, causes the depolymn. of microtubules in living cells. This leads a monolayer of well spread ECs to gradually occupy a smaller area, lose cell to cell contact, exhibit actin stress fibers at the cell periphery and acquire a rounded cell shape. We observed the neg. Δf shift values and the pos. ΔR shift values to increase significantly in magnitude over a 4-h incubation period following nocodazole addition, in a dose dependent fashion, with a transition midpoint of 900 nM. Fluorescence microscopy of the ECs, fixed on the gold QCM surface and stained for actin, demonstrated that the shape and cytoskeleton of ECs were affected by as little as 330 nM nocodazole. These results indicate that the EC QCM biosensor can be used for the study of EC attachment and to detect EC cytoskeletal alterations. We suggest the potential of this cellular biosensor for the real time identification or screening of all classes of biol. active drugs or biol. macromols. that

affect cellular attachment, regardless of their mol. mechanism of action.

IT **31430-18-9**, Nocodazole
RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
(quartz crystal microbalance cell biosensor for the detection of microtubule alterations in living cells at nanomolar nocodazole concns.)

RN 31430-18-9 HCAPLUS

CN Carbamic acid, [5-(2-thienylcarbonyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 23 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:493340 HCAPLUS
DOCUMENT NUMBER: 133:105036
TITLE: Preparation of benzimidazole vascular damaging agents
INVENTOR(S): Davis, Peter David
PATENT ASSIGNEE(S): Angiogene Pharmaceuticals Ltd., UK
SOURCE: PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000041669	A2	20000720	WO 2000-GB99	20000114
WO 2000041669	A3	20001116		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
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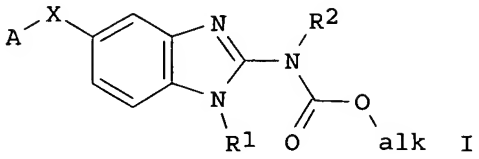
AU 2000019957	A5	20000801	AU 2000-19957	20000114
AU 778530	B2	20041209		
EP 1140078	A2	20011010	EP 2000-900294	20000114
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002534452	T2	20021015	JP 2000-593283	20000114
NZ 512842	A	20040625	NZ 2000-512842	20000114
US 6645950	B1	20031111	US 2001-889061	20011022
US 2004058972	A1	20040325	US 2003-612163	20030703

PRIORITY APPLN. INFO.: GB 1999-752 A 19990115

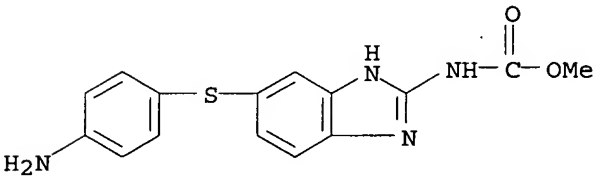
WO 2000-GB99 W 20000114
US 2001-889061 A1 20011022
OTHER SOURCE(S): MARPAT 133:105036
GI



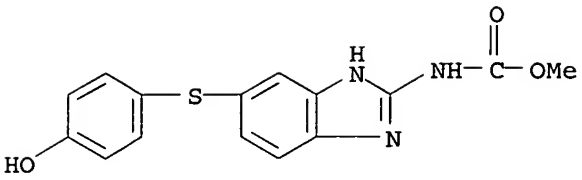
AB The title compds. [I; Alk = alkyl; X = O, S, CO, etc.; R1 = H, alkylaminocarbonyl, alkoxycarbonyl; R2 = H, alkoxycarbonyl, cyanomethyl, etc.; A = (un)substituted aromatic, heteroarom., heterocycloalkyl, etc.], a group of vascular damaging agents which can be used in the preparation of medicaments for the treatment of diseases involving neovascularization, were prepared Thus, reacting 3,4-diamino-4'-hydroxybenzophenone with 1,3-bis(methoxycarbonyl)-S-methyl-isothiourea in the presence of p-TsOH in EtOH afforded I [R1, R2 = H; alk = Me; X = CO; A = 4-HOC6H4] which showed 81% reduction in vascular volume at 500 mg/kg (i.p.) in 6 h. Most of the compds. I are novel, in particular those in which A is an aromatic or heteroarom. ring with substituents, particularly substituents which are phosphates or alkylphosphates.

IT **56073-96-2P 72447-64-4P 284019-29-0P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of benzimidazole vascular damaging agents)

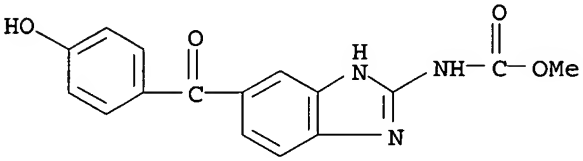
RN 56073-96-2 HCAPLUS
CN Carbamic acid, [5-[(4-aminophenyl)thio]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



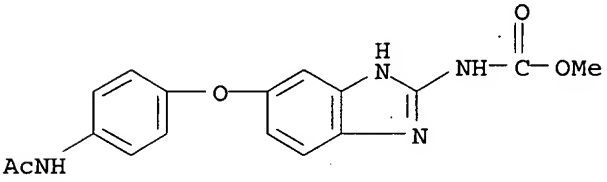
RN 72447-64-4 HCAPLUS
CN Carbamic acid, [5-[(4-hydroxyphenyl)thio]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



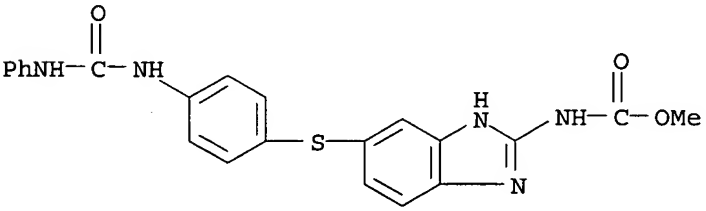
RN 284019-29-0 HCAPLUS
CN Carbamic acid, [5-(4-hydroxybenzoyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



IT **56073-91-7P 209803-68-9P 284019-30-3P**
284019-31-4P 284019-34-7P 284019-36-9P
284019-39-2P 284019-41-6P 284019-43-8P
284019-44-9P 284019-46-1P 284019-47-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of benzimidazole vascular damaging agents)
RN 56073-91-7 HCAPLUS
CN Carbamic acid, [5-[4-(acetylamino)phenoxy]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)

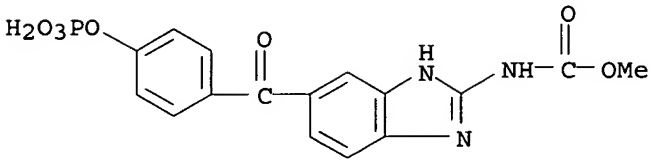


RN 209803-68-9 HCAPLUS
CN Carbamic acid, [5-[[4-[[(phenylamino)carbonyl]amino]phenyl]thio]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)

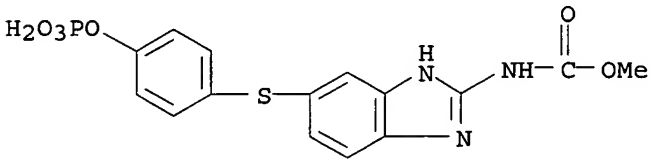


RN 284019-30-3 HCAPLUS

CN Carbamic acid, [5-[4-(phosphonooxy)benzoyl]-1H-benzimidazol-2-yl]-, C-methyl ester (9CI) (CA INDEX NAME)

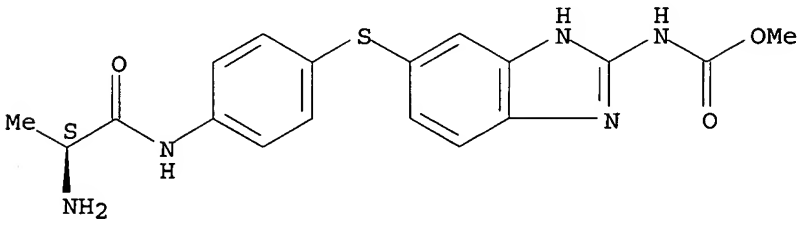


RN 284019-31-4 HCAPLUS
CN Carbamic acid, [5-[[4-(phosphonooxy)phenyl]thio]-1H-benzimidazol-2-yl]-, C-methyl ester (9CI) (CA INDEX NAME)

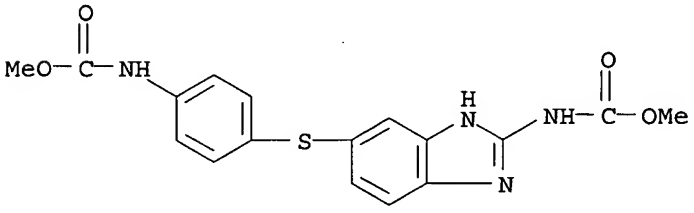


RN 284019-34-7 HCAPLUS
CN Carbamic acid, [5-[[4-[[(2S)-2-amino-1-oxopropyl]amino]phenyl]thio]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)

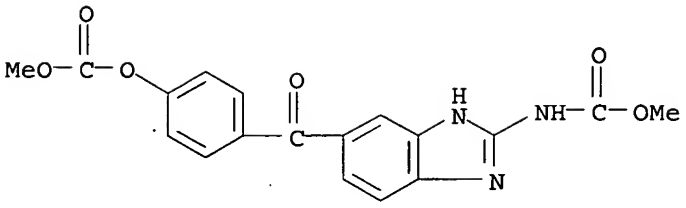
Absolute stereochemistry.



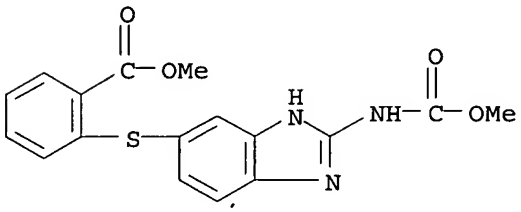
RN 284019-36-9 HCAPLUS
CN Carbamic acid, [4-[[2-[(methoxycarbonyl)amino]-1H-benzimidazol-5-yl]thio]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



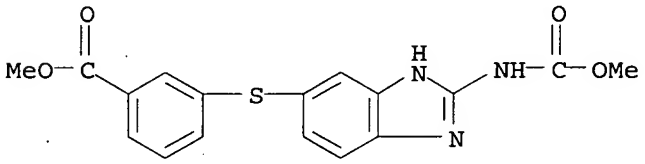
RN 284019-39-2 HCAPLUS
CN Carbonic acid, 4-[[2-[(methoxycarbonyl)amino]-1H-benzimidazol-5-yl]carbonyl]phenyl methyl ester (9CI) (CA INDEX NAME)



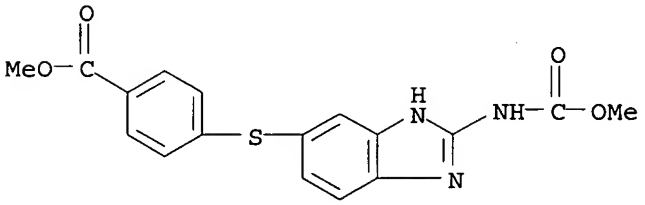
RN 284019-41-6 HCAPLUS
CN Benzoic acid, 2-[[2-[(methoxycarbonyl)amino]-1H-benzimidazol-5-yl]thio]-, methyl ester (9CI) (CA INDEX NAME)



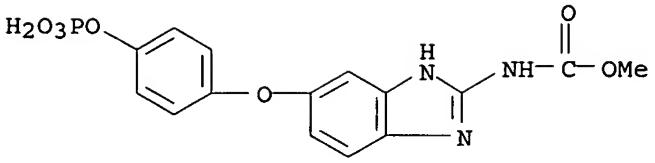
RN 284019-43-8 HCAPLUS
CN Benzoic acid, 3-[[2-[(methoxycarbonyl)amino]-1H-benzimidazol-5-yl]thio]-, methyl ester (9CI) (CA INDEX NAME)



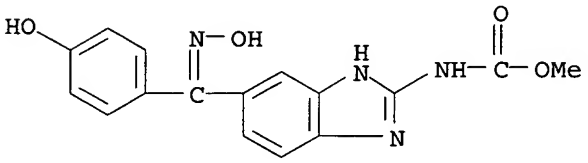
RN 284019-44-9 HCAPLUS
CN Benzoic acid, 4-[[2-[(methoxycarbonyl)amino]-1H-benzimidazol-5-yl]thio]-, methyl ester (9CI) (CA INDEX NAME)



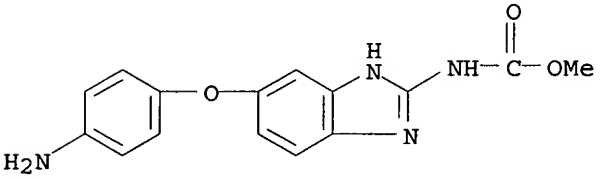
RN 284019-46-1 HCAPLUS
CN Carbamic acid, [5-[4-(phosphonooxy)phenoxy]-1H-benzimidazol-2-yl]-, C-methyl ester (9CI) (CA INDEX NAME)



RN 284019-47-2 HCAPLUS
CN Carbamic acid, [5-[(hydroxyimino)(4-hydroxyphenyl)methyl]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



IT **56073-92-8 56073-98-4**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of benzimidazole vascular damaging agents)
RN 56073-92-8 HCAPLUS
CN Carbamic acid, [5-(4-aminophenoxy)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



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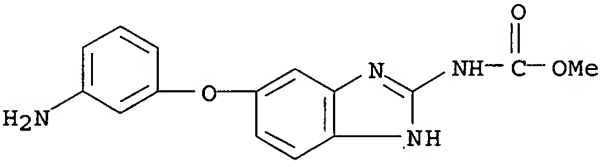
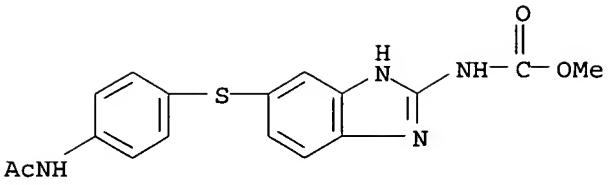
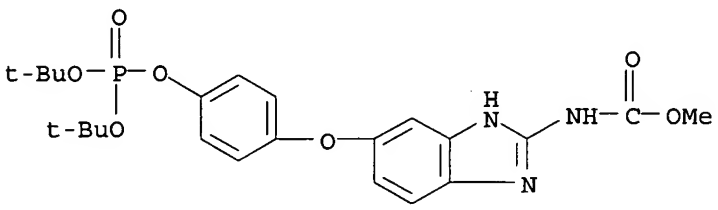
CN Carbamic acid, [5-(3-aminophenoxy)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



IT **56073-95-1 284019-59-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of benzimidazole vascular damaging agents)
RN 56073-95-1 HCAPLUS
CN Carbamic acid, [5-[[4-(acetylamino)phenyl]thio]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



RN 284019-59-6 HCAPLUS
CN Carbamic acid, [5-[4-[[bis(1,1-dimethylethoxy)phosphinyl]oxy]phenoxy]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



IT **284019-51-8P 284019-52-9P 284019-53-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of benzimidazole vascular damaging agents)
RN 284019-51-8 HCAPLUS
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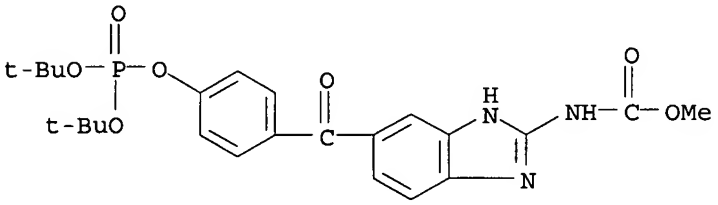
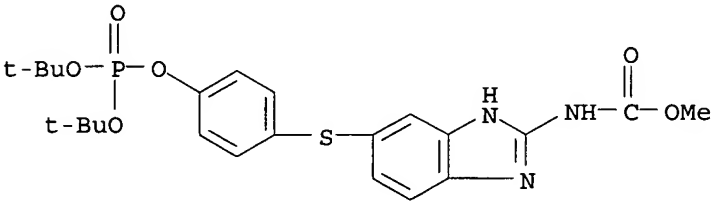


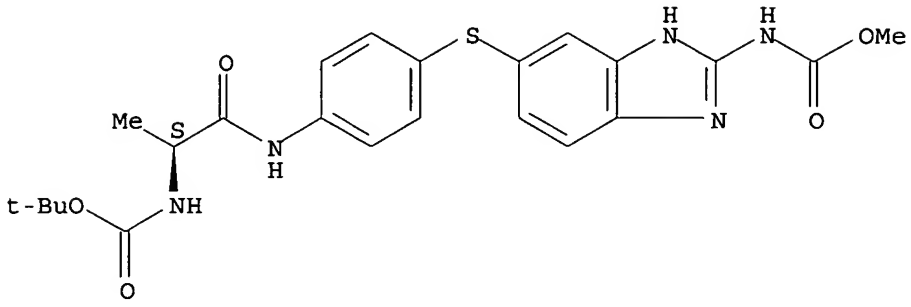
RN 284019-52-9 HCAPLUS
CN Carbamic acid, [5-[[4-[[bis(1,1-dimethylethoxy)phosphinyl]oxy]phenyl]thio]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



RN 284019-53-0 HCAPLUS
CN Carbamic acid, [5-[[4-[[(2S)-2-[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopropyl]amino]phenyl]thio]-1H-benzimidazol-2-yl]-, methyl ester (9CI)

(CA INDEX NAME)

Absolute stereochemistry.



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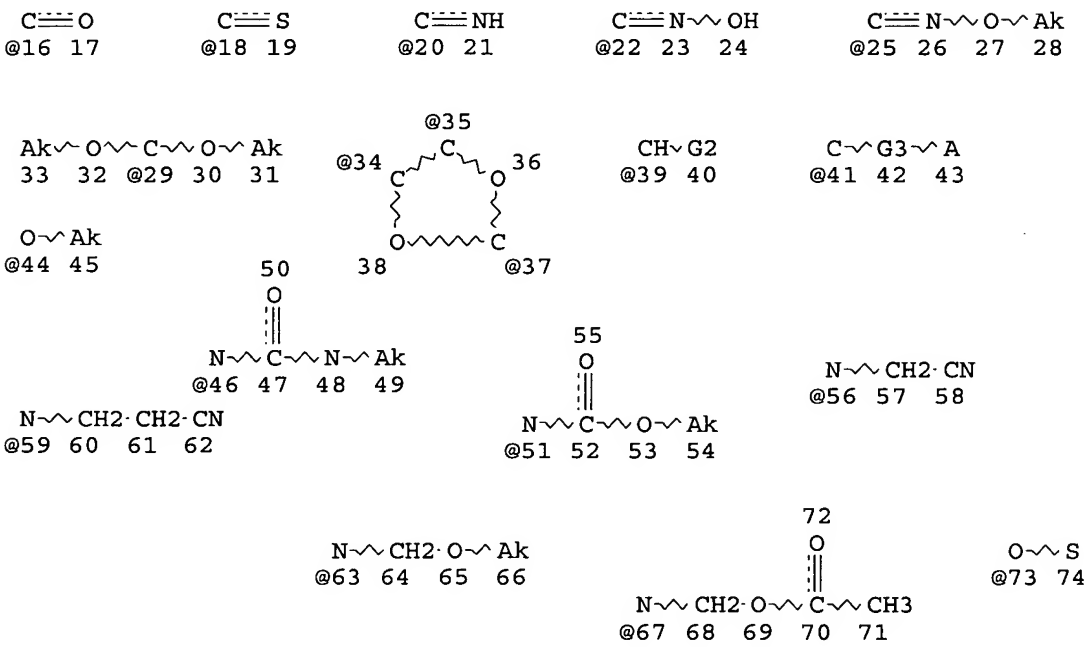
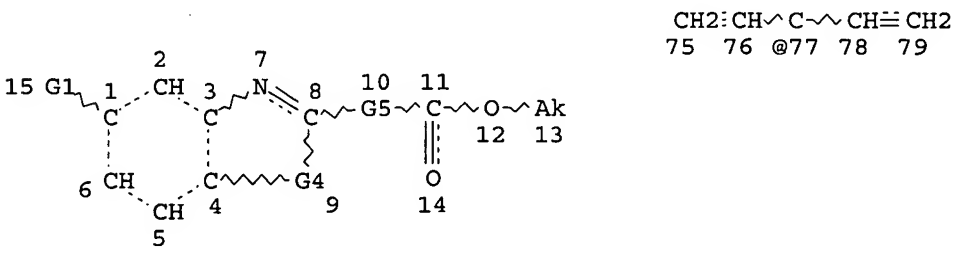


Page 1-A



Page 2-A
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VAR G4=NH/46/51
VAR G5=NH/51/56/59/67/63
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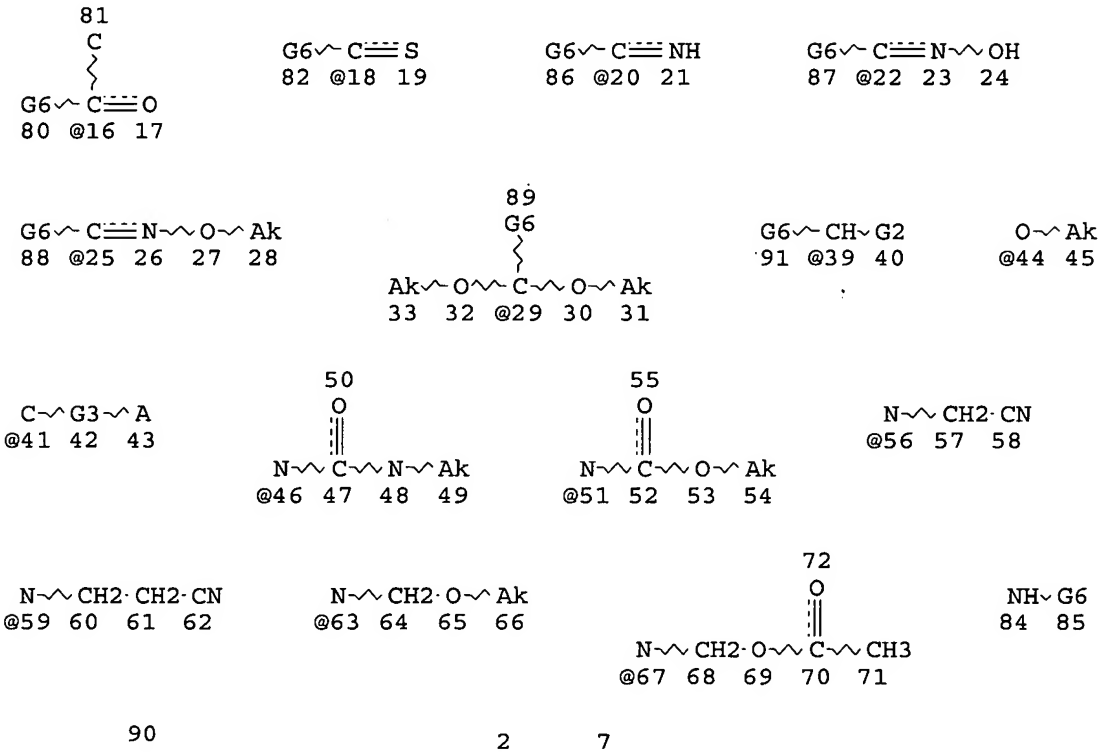
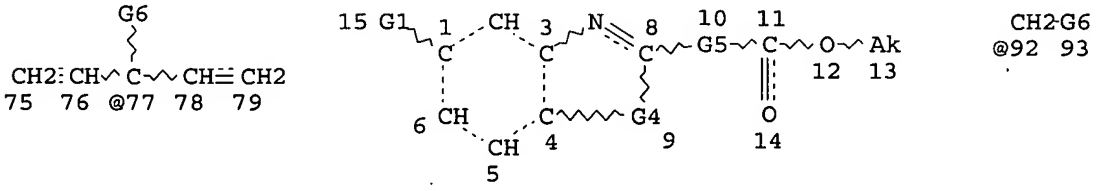
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

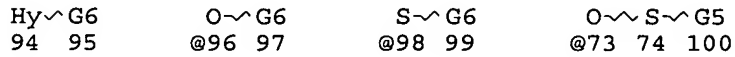
GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 79

STEREO ATTRIBUTES: NONE
L16 1804 SEA FILE=REGISTRY SSS FUL L12
L17 STR



Page 1-A





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Page 2-A
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VAR G2=OH/44/N
REP G3=(0-6) C
VAR G4=NH/46/51
VAR G5=NH/51/56/59/67/63
VAR G6=CY/41
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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  94

STEREO ATTRIBUTES: NONE
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L19           21 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L18
L20         1776 SEA FILE=REGISTRY ABB=ON  PLU=ON  L16 NOT L18
L21         3282 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L20
L22       106361 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (ANGIOGENESIS/CV OR VASCULOGEN
                 ESIS/CV OR "BLOOD VESSEL (L) NEOVASCULARIZATION"/CV OR "BLOOD
                 VESSEL, DISEASE (L) NEOVASCULARIZATION"/CV OR "EYE (L)
                 NEOVASCULARIZATION"/CV OR "EYE (L) RETINA, NEOVASCULARIZATION"/
                 CV OR "ANGIOGENESIS INHIBITORS"/CV OR "ANGIOGENIC FACTORS"/CV
                 OR "BLOOD VESSEL"/CV OR LUTEINIZATION/CV OR "ANGIOPOIETIN
                 2"/CV OR "THYMIDINE PHOSPHORYLASE"/CV OR "VASCULAR ENDOTHELIAL
                 GROWTH FACTOR"/CV OR "VASCULAR ENDOTHELIAL GROWTH FACTOR
                 C"/CV) OR ?ANGIOGEN?
L24           25 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L22 AND L21
L25           24 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L24 NOT L19
L26            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L25 AND PD=<JANUARY 15, 1999
L27           23 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L25 NOT L26
L34       256969 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ("BLOOD VESSEL"/CV OR "BLOOD
                 VESSELS"/CV OR VESSELS/CV OR ARTERIES/CV OR ARTERY/CV OR
                 AORTA/CV OR "AORTA (L) TRANSPLANT"/CV OR "CAROTID SINUS"/CV OR
                 "HEART (L) AORTOCORONARY BYPASS SURGERY"/CV OR "CAPILLARY
                 VESSEL"/CV OR "BLOOD VESSEL (L) VASA RECTA"/CV OR "CAPILLARY
                 VESSELS"/CV OR "PROSTHETIC MATERIALS AND PROSTHETICS (L) BLOOD
                 VESSEL"/CV OR "PROSTHETIC MATERIALS AND PROSTHETICS (L)
                 VASCULAR"/CV OR "PROSTHETIC MATERIALS AND PROSTHETICS (L)
                 VASCULAR, ANTITHROMBOGENIC"/CV OR VEIN/CV OR VEINS/CV OR
                 ANGIOGENESIS/CV OR "BLOOD PRESSURE"/CV OR "BLOOD VESSEL,
                 DISEASE"/CV OR CIRCULATION/CV OR "VASCULAR RESISTANCE"/CV OR
                 VASOCONSTRICTION/CV OR VASOCONSTRICTORS/CV OR VASODILATION/CV
                 OR VASODILATORS/CV)
L36           64 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L21 AND (L34 OR ?VASCUL? OR
                 ?VESSEL?)
L37           41 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L36 NOT (L26 OR L27 OR L19)
L38           17 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L37 AND PD=<JANUARY 15, 1999


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=> d ibib abs hitstr l38 1-17

L38  ANSWER 1 OF 17  HCAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         1998:476162  HCAPLUS
DOCUMENT NUMBER:          129:197544
```

TITLE: Pharmacokinetics of intravenous luxabendazole in rabbits: influence of the enterohepatic circulation

AUTHOR(S): Alvarez-Bujidos, Lucia; Ortiz, Ana I.; Molina-Martinez, Irene T.; Cubria, Carlos; Ordonez, David

CORPORATE SOURCE: Departamento de Fisiologia, Farmacologia y Toxicologia, Facultad de Veterinaria, Universidad de Leon, Leon, E-24071, Spain

SOURCE: Biopharmaceutics & Drug Disposition (**1998**), 19(5), 341-347
CODEN: BDDID8; ISSN: 0142-2782

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal

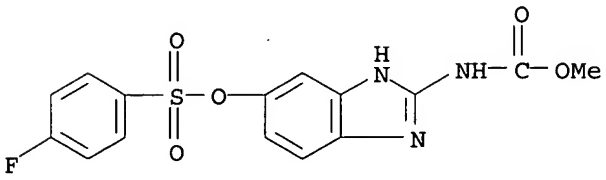
LANGUAGE: English

AB Luxabendazole (LBZ) is a new benzimidazole carbamate chemotherapeutic agent, which has proved to be very effective against adult and immature stages of the major gastrointestinal nematodes, trematodes and cestodes. While information on the efficacy of LBZ in several animal species is available, there seems to be no published information describing the disposition kinetics in any of them. As a part of the clin. development of luxabendazole, the pharmacokinetics of a single i.v. dose was investigated in parasite-free rabbits. Serial blood samples were collected at timed intervals for 12 h following administration of the dose, and concns. in plasma were determined by a sensitive and specific HPLC method. Published data on LBZ point to the possible existence of an enterohepatic cycle (EHC), and so, it seemed appropriate to carry out two different forms of test. In the first, the possibility of intestinal resorption of LBZ excreted via the bile was allowed for (Treatment 1), while in the second it was interrupted by the oral administration of activated charcoal (Treatment 2). In both cases the animals were given a single dose of 10 mg kg-1 of LBZ i.v. (i.v). Comparison of the areas under the curve (AUCs) of LBZ concns. in plasma samples taken from the animals receiving each treatment showed significant difference ($p < 0.05$). The given dose (10 mg kg-1) was converted in Treatment 1 to an ED of 13.9 mg kg-1 through recycling of LBZ. With Treatment 2 a bicompartmental distribution model for this drug was confirmed, together with high apparent distribution vols.: Vc = 1.87 L kg-1, and Vβ = 7.09 L kg-1.

IT **90509-02-7**, Luxabendazole
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(pharmacokinetics of i.v. luxabendazole in rabbits and influence of the enterohepatic circulation)

RN 90509-02-7 HCAPLUS

CN Benzenesulfonic acid, 4-fluoro-, 2-[(methoxycarbonyl)amino]-1H-benzimidazol-5-yl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

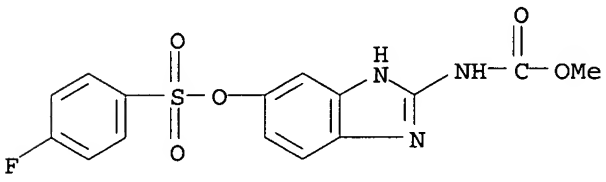
L38 ANSWER 2 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1997:737711 HCAPLUS

DOCUMENT NUMBER: 128:43392
TITLE: Pharmacokinetics of luxabendazole after oral and intravenous administration to sheep
AUTHOR(S): Ortiz, Ana I.; Alvarez-Bujidos, Lucia; Ferre, Ignacio; Ordonez, David
CORPORATE SOURCE: Departamento de Fisiologia, Farmacologia y Toxicologia, Facultad de Veterinaria, Universidad de Leon, Leon, E-24071, Spain
SOURCE: American Journal of Veterinary Research (**1997**), 58(11), 1263-1266
CODEN: AJVRAH; ISSN: 0002-9645
PUBLISHER: American Veterinary Medical Association
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The authors determined the pharmacokinetics of luxabendazole after oral and IV administration to 7 clin. normal female Merino sheep between 9 and 12 mo old. Pharmacokinetics were determined after oral and IV administration of luxabendazole at a dose of 10 mg/kg of body weight Serial blood samples were collected for 56 h after administration. Plasma concns. of luxabendazole were determined by high-pressure liquid chromatog. After IV administration, elimination of luxabendazole was slow, with a mean half-life of 8.72 h. Mean steady-state volume of distribution and mean distribution volume during the elimination phase were 3.18 and 3.10 L/kg, resp. Mean clearance was 0.24 L/kg·h, and mean area under the concentration-time curve was 41.89 mg·h/L. After oral administration, luxabendazole was slowly absorbed from the gastrointestinal tract. Mean absorption half-life was 2.26 h. Peak plasma concentration was 0.50 μg/mL and was detected 14 to 16 h after drug administration. Mean area under the concentration-time curve was 12.03 mg·h/L. Mean bioavailability was 29%. The results suggest that luxabendazole is moderately absorbed from the gastrointestinal tract in sheep, is widely distributed into **extravascular** compartments, and is cleared slowly. Determination of pharmacokinetic parameters is the first step in determining a safe and efficacious dosage regimen for luxabendazole in sheep.

IT **90509-02-7**, Luxabendazole
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(luxabendazole pharmacokinetics after oral and i.v. administration to sheep)

RN 90509-02-7 HCAPLUS
CN Benzenesulfonic acid, 4-fluoro-, 2-[(methoxycarbonyl)amino]-1H-benzimidazol-5-yl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 3 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1997:625945 HCAPLUS
DOCUMENT NUMBER: 127:210354
TITLE: Preparing a veterinary aqueous anthelmintic

formulation
INVENTOR(S): Burke, Michael Hilary
PATENT ASSIGNEE(S): Chanelle Chemicals Limited, Ire.
SOURCE: Brit. UK Pat. Appl., 11 pp.
CODEN: BAXXDU
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

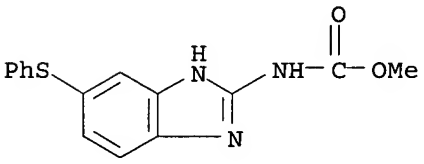
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2307871	A1	19970611	GB 1995-25073	19951206 <--
GB 2307871	B2	19990407		

PRIORITY APPLN. INFO.: GB 1995-25073 19951206

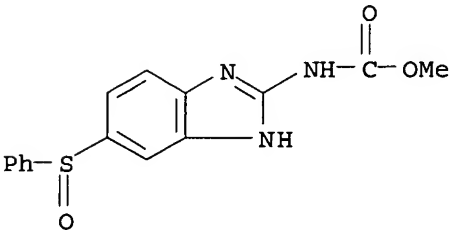
AB A process for formulating aqueous anthelmintic compns., particularly of active anthelmintic agents which are not water soluble on the industrial scale is disclosed. A batch **vessel** of at least 3,000 L - typically 10,000 L - is first filled with a predetd. quantity of water. Veterinary formulation excipients are then added to an additive hopper and the excipients emulsified in the water by circulation through a homogenizer and the batch **vessel**. A veterinary active ingredient, such as a benzimidazole anthelmintic, is then added to the additive hopper and emulsified in the mixture Further water may be added to the **vessel** to bring the batch volume to a required concentration A fenbendazole or an oxfendazole formulation may be prepared in this way. An aqueous formulation of 2.265% oxfendazole was prepared according to above procedure.

IT **43210-67-9**, Fenbendazole **53716-50-0**, Oxfendazole
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparing veterinary aqueous anthelmintic formulation)

RN 43210-67-9 HCAPLUS
CN Carbamic acid, [5-(phenylthio)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



RN 53716-50-0 HCAPLUS
CN Carbamic acid, [5-(phenylsulfinyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



L38 ANSWER 4 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN

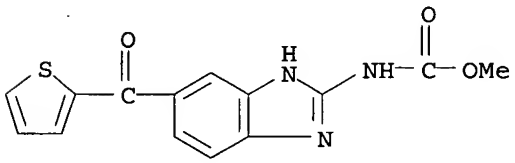
ACCESSION NUMBER: 1996:115402 HCAPLUS
DOCUMENT NUMBER: 124:225856
TITLE: Method and system for measurement of mechanical properties of molecules and cells
INVENTOR(S): Butler, James P.; Fredberg, Jeffrey J.; Ingber, Donald E.; Wang, Ning
PATENT ASSIGNEE(S): Children's Medical Center Corporation, USA; Harvard College
SOURCE: U.S., 17 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5486457	A	19960123	US 1993-112757	19930825 <--
PRIORITY APPLN. INFO.:			US 1993-112757	19930825

AB Mech. stresses and deformations are applied directly to cell surface receptors or mols. and measured using a system including a magnetic twisting device in combination with ferromagnetic microbeads coated with ligands for integrins or any other surface receptors. The system can be used diagnostically to characterize cells and mols. and to determine the effect of transformation and compds., including drugs, on the cells and mols. The system can also be used to induce cells to grow or alter production of mols. by the cells.

IT **31430-18-9**, Nocodazole
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(method and system for measurement of mech. properties of mols. and cells)

RN 31430-18-9 HCAPLUS
CN Carbamic acid, [5-(2-thienylcarbonyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



L38 ANSWER 5 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1994:564034 HCAPLUS
DOCUMENT NUMBER: 121:164034
TITLE: Transdermal administration to humans and animals
INVENTOR(S): Gertner, Avi; Rubinstein, Yosef
PATENT ASSIGNEE(S): Dermamed, Israel
SOURCE: U.S., 38 pp. Cont.-in-part of U.S. Ser. No. 710,981, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5332577	A	19940726	US 1992-876153	19920430 <--
IL 95508	A1	19950526	IL 1990-95508	19900828 <--
IL 97215	A1	19960119	IL 1991-97215	19910211 <--
US 5324521	A	19940628	US 1992-929485	19920818 <--

PRIORITY APPLN. INFO.:

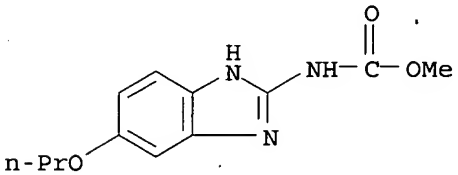
IL 1988-88808	A	19881227
US 1989-451679	A2	19891218
IL 1990-94737	A	19900614
IL 1990-95508	A	19900828
IL 1991-97215	A	19910211
US 1991-653393	A	19910211
US 1991-710981	B2	19910606

AB A pharmaceutical composition for use in the transdermal administration of a medicament to both humans and animals, which composition comprises an effective amount of a medicament adapted for transdermal administration; a transdermally transporting effective amount of a carrier for the medicament, which carrier is selected from semisolids and liqs. at ambient temps., and which carrier comprises at least one compound selected from esters of C8-24 fatty acids, pharmaceutically acceptable aliphatic polyhydroxy compds. and non-volatile paraffins; an optional medicament selected from antiinflammatory agents and antihistamines, effective to mitigate any skin-incompatibility characteristic which may otherwise be present. Administration is preferably by means of a matrix which comprises a porous, absorbent, perforate and flexible laminar solid support, having the composition absorbed thereon. The invention includes a device for use in transdermal administration, which comprises such a matrix, preferably included in a multilayer system providing a desired controlled or sustained release pattern for said medicament; as well as apparatus for applying a medicament non-adhesively to the skin of an animal, which comprises a removable enclosure bearing such a matrix or device, the apparatus being arranged for non-invasive mounting onto an animal ear.

IT **20559-55-1**, Oxybendazole **31430-15-6**, Flubendazole
31431-39-7, Mebendazole **43210-67-9**, Fenbendazole
53716-50-0, Oxfendazole **54965-21-8**, Albendazole
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(transdermal compns. for)

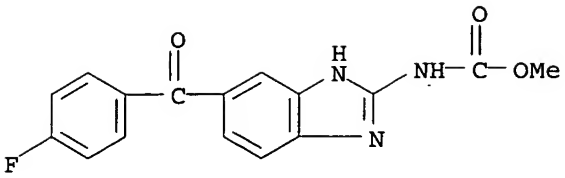
RN 20559-55-1 HCAPLUS

CN Carbamic acid, (5-propoxy-1H-benzimidazol-2-yl)-, methyl ester (9CI) (CA INDEX NAME)

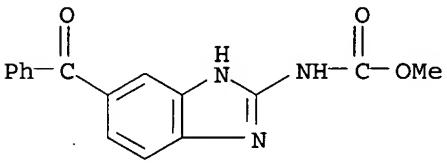


RN 31430-15-6 HCAPLUS

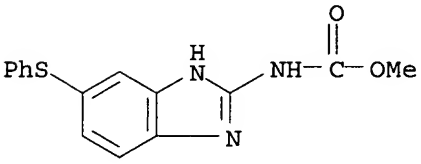
CN Carbamic acid, [5-(4-fluorobenzoyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



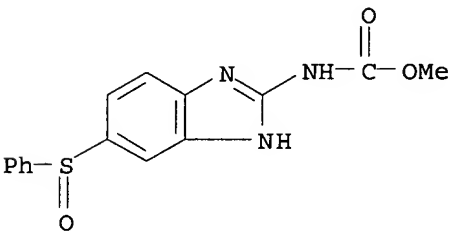
RN 31431-39-7 HCAPLUS
CN Carbamic acid, (5-benzoyl-1H-benzimidazol-2-yl)-, methyl ester (9CI) (CA INDEX NAME)



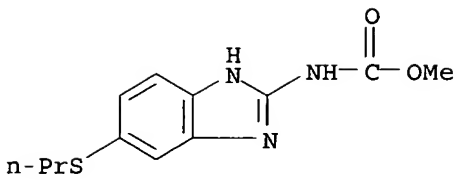
RN 43210-67-9 HCAPLUS
CN Carbamic acid, [5-(phenylthio)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



RN 53716-50-0 HCAPLUS
CN Carbamic acid, [5-(phenylsulfinyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



RN 54965-21-8 HCAPLUS
CN Carbamic acid, [5-(propylthio)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



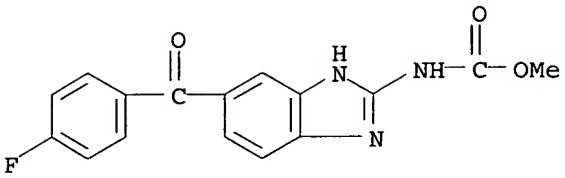
L38 ANSWER 6 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1994:253358 HCAPLUS
DOCUMENT NUMBER: 120:253358
TITLE: Cyclodextrin complexes with polymers, drugs, agrochemicals and cosmetics
INVENTOR(S): Loftsson, Thorsteinn
PATENT ASSIGNEE(S): Iceland
SOURCE: Eur. Pat. Appl., 46 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 579435	A1	19940119	EP 1993-305280	19930706 <--
EP 579435	B1	19990317		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
US 5324718	A	19940628	US 1992-912853	19920714 <--
AT 177647	E	19990415	AT 1993-305280	19930706
ES 2132190	T3	19990816	ES 1993-305280	19930706
US 5472954	A	19951205	US 1994-240510	19940511 <--
PRIORITY APPLN. INFO.:			US 1992-912853 A	19920714
			EP 1993-305280 A	19930706

AB A method for enhancing the complexation of a cyclodextrin (I) with a lipophilic and/or water-labile drug, comprising combining .apprx.0.1-70% (weight/volume) of I and .apprx.0.001-5% (weight/volume) of a water-soluble polymer in an aqueous medium. The polymer and I are dissolved in the aqueous medium before the drug is added. To a solution containing Na CM-cellulose 0.25 and 2-hydroxypropyl-β-cyclodextrin 10% was added acetazolamide (II) and the solution was heated at 120° for 20 min and allowed to equilibrate at room temperature for 3 days and amount of II was determined The solubility of II was 3.11mg/mL as compared to 0.7 for control containing only II. Different formulations containing cyclodextrin complexes with polymers and drugs are disclosed.

IT **31430-15-6DP**, Flubendazole, complexes with cyclodextrin and polymers
RL: PREP (Preparation)
(preparation of, with enhanced solubility)

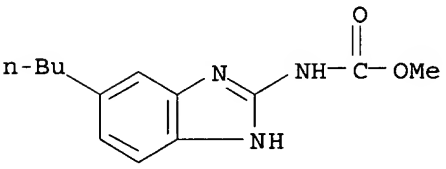
RN 31430-15-6 HCAPLUS
CN Carbamic acid, [5-(4-fluorobenzoyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



L38 ANSWER 7 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1992:400277 HCAPLUS
DOCUMENT NUMBER: 117:277
TITLE: Mechanism of allergic cross-reactions. I. Multispecific binding of ligands to a mouse monoclonal anti-DNP IgE antibody
AUTHOR(S): Varga, Janos M.; Kalchschmid, Gertrud; Klein, Georg F.; Fritsch, Peter
CORPORATE SOURCE: Dep. Dermatol., Univ. Innsbruck, Innsbruck, 6020, Austria
SOURCE: Molecular Immunology (**1991**), 28(6), 641-54
CODEN: MOIMD5; ISSN: 0161-5890
DOCUMENT TYPE: Journal
LANGUAGE: English

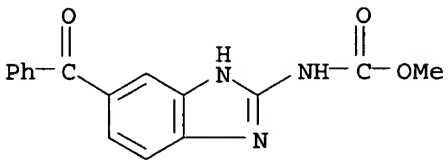
AB A recently developed solid-phase binding assay was used to investigate the specificity of ligand binding to a mouse monoclonal anti-dinitrophenyl IgE (I). All DNP-amino acids, that were tested inhibited the binding of the radio-labeled I to DNP covalently attached to polystyrene microplates; however, the concentration for 50% inhibition varied within four orders of magnitude, DNP-L-serine being the most and DNP-L-proline the least potent inhibitor. In addition to DNP analogs, a large number of drugs and other compds. were tested for their ability to compete with DNP for the binding site of I. At the concentration used for screening, 59% of compds. had no significant inhibition; 19% inhibited the binding of I more than 50%. Several families of compds. (tetracyclines, polymyxins, phenothiazines, salicylates, and quinones) that were effective competitors were found. Within these families, changes in the functional groups attached to the family stem had major effects on the affinity of ligand binding. The occurrence frequencies of interactions of ligands with I is in good agreement with the semi-empirical model for multispecific antibody-ligand interactions.

IT **14255-87-9**, Parbendazole **31431-39-7**, Mebendazole
RL: BIOL (Biological study)
(binding of, to anti-dinitrophenol monoclonal antibody, allergic cross-reaction mechanism in relation to)
RN 14255-87-9 HCAPLUS
CN Carbamic acid, (5-butyl-1H-benzimidazol-2-yl)-, methyl ester (9CI) (CA INDEX NAME)



RN 31431-39-7 HCAPLUS
CN Carbamic acid, (5-benzoyl-1H-benzimidazol-2-yl)-, methyl ester (9CI) (CA

INDEX NAME)



L38 ANSWER 8 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1992:136276 HCAPLUS
DOCUMENT NUMBER: 116:136276
TITLE: Transdermal administration of pharmaceuticals to humans and animals
INVENTOR(S): Gertner, Avi; Rubinstein, Yosef
PATENT ASSIGNEE(S): Dermamed, Israel
SOURCE: Eur. Pat. Appl., 50 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 463454	A2	19920102	EP 1991-109534	19910611 <--
EP 463454	A3	19920610		
EP 463454	B1	20010926		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
IL 95508	A1	19950526	IL 1990-95508	19900828 <--
IL 97215	A1	19960119	IL 1991-97215	19910211 <--
AU 9178223	A1	19911219	AU 1991-78223	19910606 <--
AU 653156	B2	19940922		
CA 2044371	AA	19911215	CA 1991-2044371	19910611 <--
AT 206057	E	20011015	AT 1991-109534	19910611
BR 9102454	A	19920121	BR 1991-2454	19910613 <--
JP 06065059	A2	19940308	JP 1991-143390	19910614 <--

PRIORITY APPLN. INFO.:

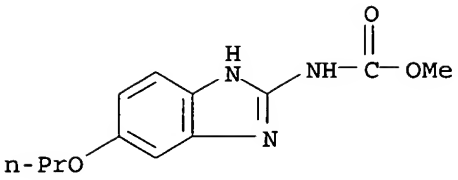
IL 1990-94737	A	19900614
IL 1990-95508	A	19900828
IL 1991-97215	A	19910211
US 1991-653393	A	19910211

AB A transdermal preparation comprises (1) a medicament adapted for transdermal administration, (2) a carrier comprising ≥1 C8-24 fatty acid esters, and (3) an optional anti-inflammatory agent or antihistamine. The preparation includes a multilayer matrix, providing a desired controlled- or sustained-released pattern for the drug. Soybean oil and BHT were heated at 38° with progesterone and the mixture was used to impregnate an absorbent sponge. Ear devices containing the sponges were used on ewes and a sustained-release of the progesterone was observed Schematic diagrams of the delivery device are shown.

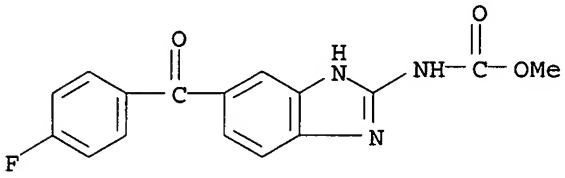
IT **20559-55-1** **31430-15-6**, Flubendazole **31431-39-7**, Mebendazole **43210-67-9**, Fenbendazole **53716-50-0** **54965-21-8**, Albendazole
RL: BIOL (Biological study)
(transdermal preparation containing fatty acid ester matrix and)

RN 20559-55-1 HCAPLUS
CN Carbamic acid, (5-propoxy-1H-benzimidazol-2-yl)-, methyl ester (9CI) (CA

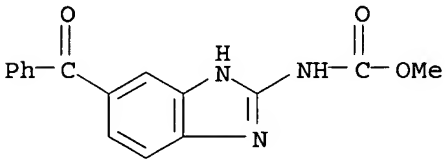
INDEX NAME)



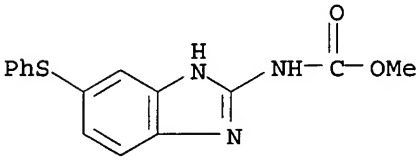
RN 31430-15-6 HCAPLUS
CN Carbamic acid, [5-(4-fluorobenzoyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



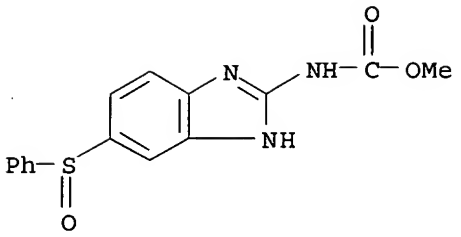
RN 31431-39-7 HCAPLUS
CN Carbamic acid, (5-benzoyl-1H-benzimidazol-2-yl)-, methyl ester (9CI) (CA INDEX NAME)



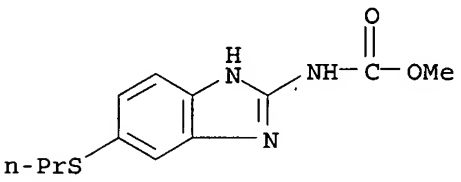
RN 43210-67-9 HCAPLUS
CN Carbamic acid, [5-(phenylthio)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



RN 53716-50-0 HCAPLUS
CN Carbamic acid, [5-(phenylsulfinyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



RN 54965-21-8 HCAPLUS
CN Carbamic acid, [5-(propylthio)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



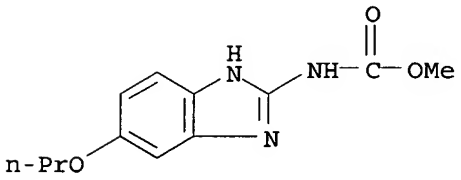
L38 ANSWER 9 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1991:94690 HCAPLUS
DOCUMENT NUMBER: 114:94690
TITLE: Comparative susceptibility to anthelmintics of Brugia pahangi in jirds infected by different methods
AUTHOR(S): Surin, Johari; Denham, D. A.
CORPORATE SOURCE: London Sch. Hyg. Trop. Med., London, WC1E 7HT, UK
SOURCE: Journal of Helminthology (**1990**), 64(3), 232-8
CODEN: JOHLAT; ISSN: 0022-149X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB It is possible to infest jirds with B. pahangi by three methods. Infective larvae (L3) can be injected either i.p., when adults develop in the peritoneal cavity, or s.c., when they develop in the lymphatics or the heart and blood **vessels** associated with the lungs. Alternatively adult worms which have been grown in the peritoneal cavities of jirds can be implanted into the peritoneal cavities of other jirds. This latter system has been widely used for screening for new filaricides. The authors have compared the activity of 9 macrofilaricidal compds. against these 3 types of infection. Mebendazole and albendazole were more active against implanted adults than against L3 induced adults in the peritoneal cavity. Oxibendazole, flubendazole, CGP24588A and oxfendazole were equally active against both types of worm. CGP20376, Mel Ga and Mel Ni were more active against adult worms derived from inoculated L3 than implanted worms. When comparing intra-lymphatic and i.p. adults (both derived from L3 infestations and in the same jirds) albendazole and CGP20376 were active at the same levels against both types of infestation. Mebendazole, flubendazole, oxfendazole, CGP24588A, Mel Ga and Mel Ni were more active against i.p. adults than intra-lymphatic adults. No drug was more active against intra-lymphatic adults than against adults.

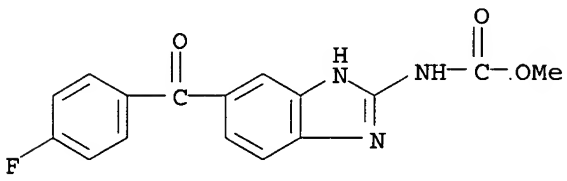
IT **20559-55-1**, Oxibendazole **31430-15-6**, Flubendazole **31431-39-7**, Mebendazole **53716-50-0**, Oxfendazole **54965-21-8**, Albendazole
RL: BIOL (Biological study)

(Brugia pahangi susceptibility to, in jirds, methods of infestation in relation to)

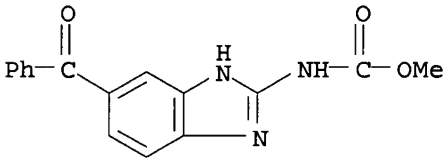
RN 20559-55-1 HCAPLUS
CN Carbamic acid, (5-propoxy-1H-benzimidazol-2-yl)-, methyl ester (9CI) (CA INDEX NAME)



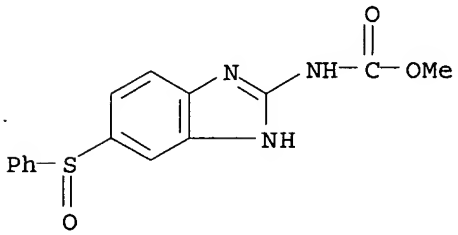
RN 31430-15-6 HCAPLUS
CN Carbamic acid, [5-(4-fluorobenzoyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



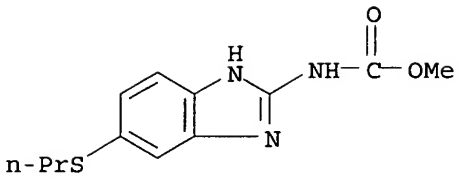
RN 31431-39-7 HCAPLUS
CN Carbamic acid, (5-benzoyl-1H-benzimidazol-2-yl)-, methyl ester (9CI) (CA INDEX NAME)



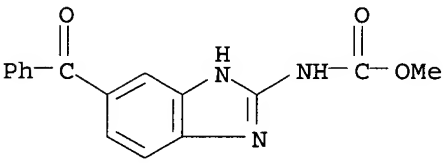
RN 53716-50-0 HCAPLUS
CN Carbamic acid, [5-(phenylsulfinyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



RN 54965-21-8 HCAPLUS
CN Carbamic acid, [5-(propylthio)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



L38 ANSWER 10 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1989:400855 HCAPLUS
DOCUMENT NUMBER: 111:855
TITLE: Effect of drugs on histamine radio-enzyme assay
AUTHOR(S): Harvima, Rauno J.; Harvima, Ilkka T.; Kajander, E. Olavi; Penttila, Ilkka M.; Horsmanheimo, Maija; Fraki, Jorma E.
CORPORATE SOURCE: Dep. Dermatol., Univ. Kuopio, Kuopio, Finland
SOURCE: Clinica Chimica Acta (**1989**), 180(3), 231-9
CODEN: CCATAR; ISSN: 0009-8981
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The effects of >200 drugs and other compds. on histamine radioenzymic assay were studied. Some muscle relaxants (e.g. alcuronium), some sympathomimetics (e.g., dopamine, isoxsuprine, tyramine, and possibly phenylethylamine), antimalarial drugs, procaine, procainamide, Berenil, and serotonin interfered with this assay. In some special cases potentially inhibitory drugs were some muscle relaxants (e.g., vecuronium, pancuronium, and tubocarine), antidepressants, antihistamines (e.g., cimetidine, ranitidine, and diphenhydramine), chinidin, disopyramide, tolazoline, and salazosulfapyridine.
IT **31431-39-7**, Mebendazole
RL: ANST (Analytical study)
(histamine radioenzyme assay response to)
RN 31431-39-7 HCAPLUS
CN Carbamic acid, (5-benzoyl-1H-benzimidazol-2-yl)-, methyl ester (9CI) (CA INDEX NAME)



L38 ANSWER 11 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1988:15825 HCAPLUS
DOCUMENT NUMBER: 108:15825
TITLE: **Cardiovascular** effects of broad spectrum anthelmintic drugs in experimental animals
AUTHOR(S): El-Sirafy, Usama M. H.; Hassan, Samira M. M.; Hassan, M. M.; Bastawi, Ahmed; Abdel-Hafize, Sadia
CORPORATE SOURCE: Fac. Med., Ain Shams Univ., Cairo, Egypt
SOURCE: Egyptian Journal of Veterinary Science (**1987**), Volume Date 1986, 23(1), 113-22, 6 plates
CODEN: EJVSAU; ISSN: 0301-8199
DOCUMENT TYPE: Journal

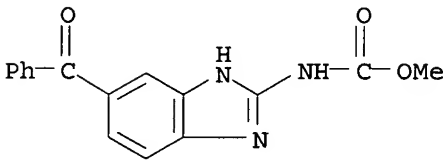
LANGUAGE: English

AB The **cardiovascular** effects of the broad spectrum anthelmintic drugs, namely mebendazole (Vermox), thiabendazole (Mintezol) and praziquantel (Biltracide) were studied in anesthetized dogs and on isolated organs. I.v. injection of 2-16, 1-4 and 6-24 mg/kg, resp. for thiobendazole mebendazole and praziquantel in chloralozed dogs produced a dose-dependent hypotensive effect with tachycardia, which was marked after administration of mebendazole. Underlying myocardial ischemia and ventricular fibrillation, were observed with higher doses (16 and 24 mg/kg) of praziquantel and thiabendazole. The in-vitro studies demonstrated a dose-related neg. inotropic effect on the isolated rabbit's and frog's heart and a relaxant action on the isolated rabbit aortic strip.

IT **31431-39-7**, Mebendazole
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(**cardiovascular** system response to)

RN 31431-39-7 HCAPLUS

CN Carbamic acid, (5-benzoyl-1H-benzimidazol-2-yl)-, methyl ester (9CI) (CA INDEX NAME)



L38 ANSWER 12 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1984:17292 HCAPLUS

DOCUMENT NUMBER: 100:17292

TITLE: Effectiveness of fenbendazole against later 4th-stage Strongylus vulgaris in ponies

AUTHOR(S): Slocombe, J. O. D.; McCraw, B. M.; Pennock, P. W.; Baird, J. D.

CORPORATE SOURCE: Ontario Vet. Coll., Univ. Guelph, Guelph, ON, N1G 2W1, Can.

SOURCE: American Journal of Veterinary Research (**1983**), 44(12), 2285-9
CODEN: AJVRAH; ISSN: 0002-9645

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

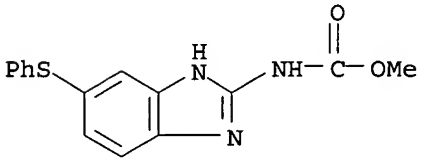
AB Twelve pony foals (reared worm-free) were inoculated with S. vulgaris. Approx. 8 wk later, 4 of the foals were given fenbendazole [**43210-67-9**] (10% suspension) at a dosage rate of 10 mg/kg daily for 5 days and 4 foals were given the suspension at a dosage rate of 50 mg/kg daily for 3 days; the remaining foals were given a placebo. All treatments were administered by stomach tube. Fenbendazole was 99.6 and 97.9% effective in the 2 treatment groups, resp., in eliminating later 4th-stage S. vulgaris larvae located near the origin of major intestinal arteries. On microscopic examination of the ileocolic artery from fenbendazole-treated foals, a few larval remnants were found beneath the tunica intima in small organized mural thrombi overgrown with endothelium. It would appear that larvae are rapidly destroyed after administration of fenbendazole. A pony foal reared on pasture and with arteriog. evidence of arteritis of the cranial mesenteric and ileocolic arteries was treated with fenbendazole (10% suspension) by stomach tube at a dosage rate of 50 mg/kg of body weight daily for 3 days. By arteriog. examination made 4 wk later,

there was evidence of regression of the lesion, and at necropsy done a week later, there was no arteritis or larvae in the lumen of those arteries.

IT **43210-67-9**
RL: BIOL (Biological study)
(Strongylus vulgaris infestation response to, in ponies)

RN 43210-67-9 HCAPLUS

CN Carbamic acid, [5-(phenylthio)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



L38 ANSWER 13 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1982:45930 HCAPLUS

DOCUMENT NUMBER: 96:45930

TITLE: Cure and prophylaxis of equine larval delafondiosis

AUTHOR(S): Kadyrov, N. T.

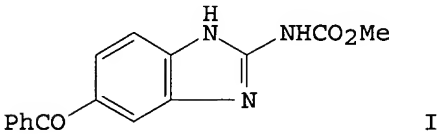
CORPORATE SOURCE: Tselinogr. S-kh. Inst., Tselinograd, USSR

SOURCE: Vestnik Sel'skokhozyaistvennoi Nauki Kazakhstana (**1981**), (10), 64-6
CODEN: VSNKBD; ISSN: 0042-4684

DOCUMENT TYPE: Journal

LANGUAGE: Russian

GI



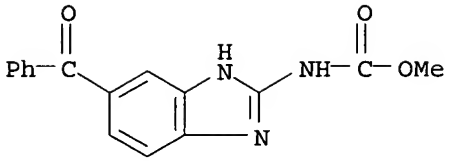
I

AB mebenvet (I) [**31431-39-7**] (10% in pellets) had larvicidal activity against migrating and growing 4th and 5th stage Delafondia vulgaris larvae in the blood **vessels** of exptl. infested horses. Biannual prophylactic administration of I was also studied in horses. No I embryotoxicity or teratogenicity was observed Regimens for the veterinary use of I in horses are recommended.

IT **31431-39-7**
RL: BIOL (Biological study)
(delafondiosis treatment by, in horse)

RN 31431-39-7 HCAPLUS

CN Carbamic acid, (5-benzoyl-1H-benzimidazol-2-yl)-, methyl ester (9CI) (CA INDEX NAME)

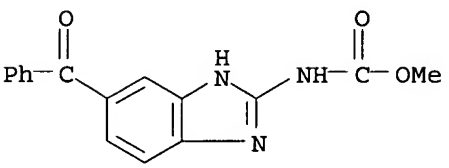


L38 ANSWER 14 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1981:580886 HCAPLUS
DOCUMENT NUMBER: 95:180886
TITLE: Histopathological and histoenzymatic studies on experimental Taenia saginata cysticercosis
AUTHOR(S): Gustowska, Leokadia; Pawlowski, Zbigniew
CORPORATE SOURCE: Dep. Pathol. Anat., Med. Acad. Poznan, Poznan, 60-355, Pol.
SOURCE: Veterinary Parasitology (**1981**), 8(3), 211-18
CODEN: VPARDI; ISSN: 0304-4017
DOCUMENT TYPE: Journal
LANGUAGE: English

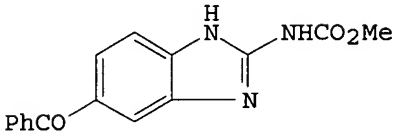
AB In young T. saginata cysticerci the reactions for alkaline phosphatase (AlPh) [9001-78-9], acid phosphatase (AcPh) [9001-77-8], ATP-ase [9000-83-3], succinic dehydrogenase (SDH) [9002-02-2] and lactic dehydrogenase (LDH) [9001-60-9] were mild. The reactions were concentrated in the walls of spiral canals (AlPh, SDH) and in the outer layer of the bladder (AlPh). The reactions were more intensive in older cysticerci. In these, the reaction of AlPh marked a network of blood **vessels** winding around the larva. In drying cysticerci, the reactions for oxidative enzymes (SDH, LDH) were weaker but the activity of the hydrolytic enzymes (AlPh, AcPh) was increased. Apparently, histoenzymic reactions may be helpful in determining the viability and the age of cysticerci. T. saginata Cysticerci in sheep and goats provoked an early and intensive cellular reaction. The histopathol. appearance of the cysticerci as they were destroyed in the abnormal hosts was similar to that of cysticerci localized in abnormal tissue of the natural host (e.g., lung of calves). Treatment with mebendazole [**31431-39-7**] caused an intensive infiltrative reaction against drying cysticerci and a degenerative process in the surrounding muscle tissue. The treatment with praziquantel [55268-74-1] provoked a weak infiltration around dead cysticerci and did not affect the muscle tissue. In both cases the remnants of T. saginata cysticerci disappeared very slowly.

IT **31431-39-7**
RL: BIOL (Biological study)
(Taenia saginata cysticerci histoenzymic and histopathol. reactions to, in infestation in cattle)

RN 31431-39-7 HCAPLUS
CN Carbamic acid, (5-benzoyl-1H-benzimidazol-2-yl)-, methyl ester (9CI) (CA INDEX NAME)



L38 ANSWER 15 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1979:502000 HCAPLUS
DOCUMENT NUMBER: 91:102000
TITLE: Studies on some pharmacological actions of mebendazole - a broad spectrum anthelmintic
AUTHOR(S): Shivakumar, A. M.; Sabir, M.
CORPORATE SOURCE: Div. Physiol. Pharmacol., Indian Vet. Res. Inst., Izatnagar, India
SOURCE: Indian Veterinary Journal (**1979**), 56(2), 105-11
CODEN: IVEJAC; ISSN: 0019-6479
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

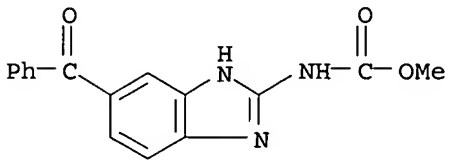


I

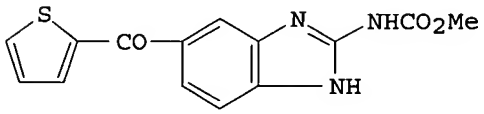
AB Mebendazole (I) [**31431-39-7**] (1-30 mg kg) had no effect on the blood pressure in 7 of 11 anesthetized dogs. However, it reduced the hypertension induced by carotid occlusion and by adrenaline and noradrenaline without altering the response to angiotensin. It had no effect on the hypotension induced by acetylcholine, histamine, and isoprene. In the remaining 4 dogs, I (10.30 mg/kg) produced steep and fatal hypotension. I had no effect on the nictitating membrane and spleen volume or on their responses to adrenaline and noradrenaline. In mice, I produced an inconsistent effect on rectal temperature and had no effect on hexobarbitone-induced sleep. Its infiltration into guinea pig skin did not produce local anesthesia. In 6 of 10 anesthetized frogs, I caused vasodilatation resulting in red flush and aggregation of melanin granules in melanophores. It had apparently no effect on the isolated guinea pig ileum or on its responses to histamine, carbachol, bradykinin, BaCl2, and KCl. It inhibited the acetylcholine response in 2 of 4 expts. I had no effect on the tone of pendular movements of the rabbit jejunum or on relaxation induced by adrenaline or contractions induced by acetylcholine, BaCl2, and KCl. I had no effect on the isolated guinea pig seminal vesicle, estrogenized rat uterus and frog rectus abdominis muscle. Also, it did not modify the responses induced by adrenaline and noradrenaline on guinea pig seminal vesicle, by oxytocin and 5-hydroxy-tryptamine on rat uterus and by acetylcholine on frog rectus abdominis muscle. I produced a neg. inotropic and chronotropic effect on the isolated rabbit heart and finally stopped it in diastole. The heart could not be revived after injecting adrenaline or digoxin. CaCl2, however, revived the heart for a brief period which was again arrested in systole. It induced vasoconstriction and reduced the input and the output of perfusion fluid in rat hind limb preparation; the vasoconstriction was reversed by aminophylline.

IT **31431-39-7**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(Uses)
(pharmacol. of)
RN 31431-39-7 HCAPLUS
CN Carbamic acid, (5-benzoyl-1H-benzimidazol-2-yl)-, methyl ester (9CI) (CA INDEX NAME)



L38 ANSWER 16 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1976:472240 HCAPLUS
DOCUMENT NUMBER: 85:72240
TITLE: Oncodazole (R 17934): a new anti-cancer drug interfering with microtubules. Effects on neoplastic cells cultured in vitro and in vivo
AUTHOR(S): De Brabander, M.; Van de Veire, R.; Aerts, F.; Geuens, G.; Borgers, M.; Desplenter, L.; De Cree, J.
CORPORATE SOURCE: Res. Lab., Janssen Pharm., Beerse, Belg.
SOURCE: Microtubules Microtubule Inhibitors, Proc. Int. Symp. (**1975**), 509-21. Editor(s): Borgers, M.; De Brabander, M. North-Holland: Amsterdam, Neth. CODEN: 33KHAX
DOCUMENT TYPE: Conference
LANGUAGE: English
GI



I

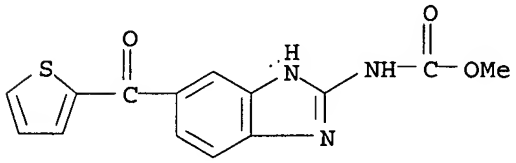
AB R 17934 (Oncodazole)(I) [**31430-18-9**] showed antitumoral activity against exptl. and human neoplasms. Ultrastructural investigations on tissue culture cells showed that the activity of I resided, most probably, in its microtubule-dissoluting properties. This resulted in the complete disorganization of both mitotic and interphase cells as a consequence of the arrest of ordered directional organelle movements. Prolonged treatment resulted in the appearance of bundles composed of 100 Å filaments and of annulated lamellae, as is the case in cells treated with other antimicrotubular substances, suggesting a close functional link between these structures and microtubules. In vivo expts. on the L1210 system and preliminary clin. trials in human patients with micronized suspensions of I showed that I was avidly phagocytized by neoplastic cells and normal phagocytes. The antimicrotubular activity of I remained present when given in this formulation and resulted in disorganization of dividing and nondividing neoplastic cells. The microtubules of nondividing normal cells (phagocytes, peritoneal mesothelial cells, liver parenchymal cells, **vascular** endothelial cells, etc.) were

unaffected by doses many times higher than those which attack microtubules of neoplastic cells in the same animals.

IT **31430-18-9**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(neoplasm inhibition by)

RN 31430-18-9 HCAPLUS

CN Carbamic acid, [5-(2-thienylcarbonyl)-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



L38 ANSWER 17 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1972:81246 HCAPLUS

DOCUMENT NUMBER: 76:81246

TITLE: Chemotherapy of angiostrongyliasis in dogs

AUTHOR(S): Laemmler, G.; Srivastava, V. K.; Herzog, H.; Saupe, E.

CORPORATE SOURCE: Inst. Parasitol. Parasit. Kr. Tiere, Justus Liebig-Univ. Giessen, Giessen, Fed. Rep. Ger.

SOURCE: Berliner und Muenchener Tieraerztliche Wochenschrift (**1971**), 84(20), 383-6
CODEN: BEMTAM; ISSN: 0005-9366

DOCUMENT TYPE: Journal

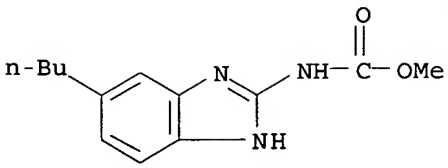
LANGUAGE: German

AB Dl-tetramisole (I) [5036-02-2] (10 mg/kg/day, s.c.), dl-tetramisole-HCl [5086-74-8] (15 mg/kg/day, orally), and l-tetramisole [14769-73-4] (7.5 mg/kg/day, s.c., or 10 mg/kg/day, orally) given for 2 days to dogs infected with Angiostrongylus vasorum completely killed mature worms in the pulmonary **vessels** and heart, followed by a rapid decrease of the larval output in the feces to zero. Of the other broad-spectrum anthelmintics tested, cambendazole [26097-80-3] (25, 50, 75, or 100 mg/kg/day), pyrantel tartrate [33401-94-4] (30 mg/kg/day), and morantel tartrate [26155-31-7] (40 mg/kg/day) given orally for 3 days clearly decreased larval excretion in the feces but did not completely kill worms in the lung **vessels** and heart, thiabendazole [148-79-8] (50, 75, or 100 mg/kg/day orally for 3 days) only slightly decreased fecal larval excretion for a short time, and parbendazole [**14255-87-9**] (50 mg/kg/day orally for 3 days) had no significant effect. Of the filaricidal drugs tested, 3-cyclohexylcarbonyl-1-methylpiperazine citrate [34262-99-2], 2-[2-(4-hydroxyphenyl)-6-benzimidazolyl]-6-(1-methyl-4-piperazyl)benzimidazole-3HCl [23491-45-4], and trichlorfon [52-68-6], only the latter administered orally at 50 mg/kg/day for 3 days decreased fecal larval excretion but did not abolish live worms in the organism.

IT **14255-87-9**
RL: BIOL (Biological study)
(in Angiostrongylus vasorum infestation treatment, in dogs)

RN 14255-87-9 HCAPLUS

CN Carbamic acid, (5-butyl-1H-benzimidazol-2-yl)-, methyl ester (9CI) (CA INDEX NAME)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